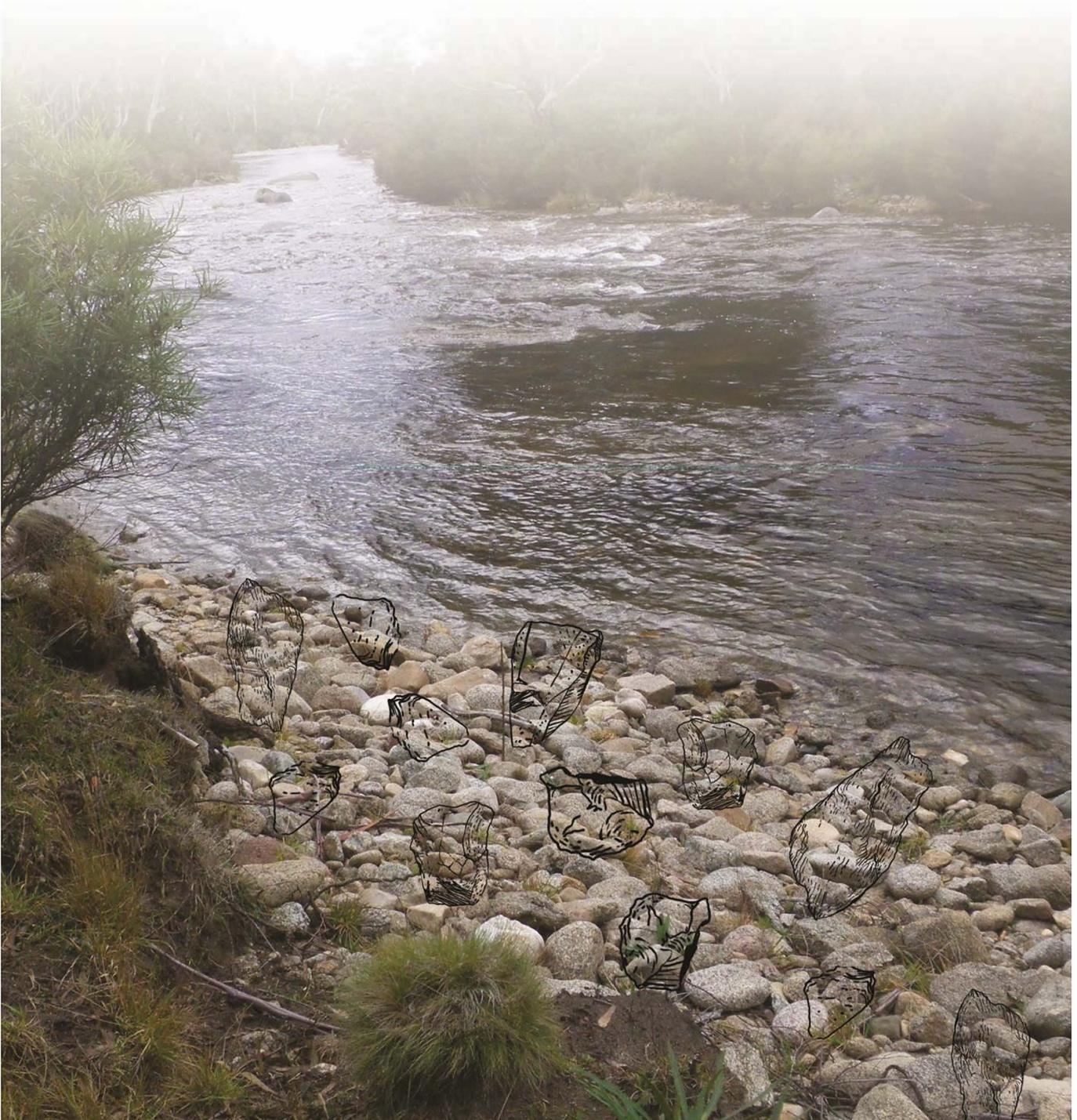


Aboriginal cultural values report

Investigating Aboriginal people's associations with
wild horses in Kosciuszko National Park, NSW

2021



WARNING: THIS REPORT MAKES REFERENCES TO ABORIGINAL PEOPLE WHO HAVE DIED.

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Abbreviations and acronyms

ACHA	Aboriginal Cultural Heritage Assessment
AIHMS	Aboriginal Heritage Information Management System (database)
ACT	Australian Capital Territory
CAP	Community Advisory Panel
DEC	Department of Environment and Conservation
EAL	Equine Assisted Learning (program)
EIS	Environmental Impact Statement
FPIC	Free, Prior and Informed Consent
GIS	Geographic information systems
ICOMOS	International Council on Monuments and Sites
ILSC	Indigenous Land and Sea Corporation
KNP	Kosciuszko National Park
KNPAHS	Kosciuszko National Park Aboriginal Heritage Study
NOHC	Navin Officer Heritage Consultants
LALC	Local Aboriginal Land Council
MINARK	Management of INformation in ARKaeology
MOU	Memorandum of Understanding
NPWS	National Parks and Wildlife Service
NSW	New South Wales
OEH	Office of Environment and Heritage
PAD	Potential Archaeological Deposit
SAP	Scientific Advisory Panel
UNESCO	United Nations Educational, Scientific and Cultural Organization

Executive summary

This investigation contributes towards development of the draft wild horse heritage management plan for Kosciuszko National Park (KNP). The work aims to gain a better understanding of Aboriginal people's current awareness of wild horse management, the cultural significance of wild horses and how wild horses could be impacting Aboriginal cultural heritage values within KNP. This study has provided the first formal opportunity for Aboriginal people to express their views on the management of wild horses in KNP.

Research for this investigation was undertaken by Susan Donaldson (anthropologist) and Sue Feary (archaeologist). Background research into previously recorded Aboriginal oral histories, archaeological records and other ethnographic data was undertaken. Six one-on-one semi structured interviews were completed with Aboriginal people with cultural connections to KNP. A triangulation methodology was then applied to identify places and landscapes most vulnerable to impacts from wild horses using three main information sources – ethnographic/ethnohistoric, oral traditions, and the archaeological record. The authors acknowledge that increased Aboriginal participation would have improved research outcomes.

Aboriginal participants in this study consider KNP as being part of an important broader Aboriginal cultural landscape. The distinguishing feature connecting Aboriginal custodians to KNP compared with other groups in society is that Aboriginal custodians have a connection to their country which has an ontological base, that is, their connections are founded in an ancient religion. Aboriginal people continue to have a spiritual connection to the Australian alpine region, albeit in multiple forms.

Aboriginal archaeological heritage is a significant component of the values and connections that Aboriginal people have for KNP. The Heritage NSW Aboriginal Heritage Information Management System (AHIMS) database shows there are over 1,000 recorded archaeological sites in KNP, and there are likely to be many more as yet unrecorded sites. Most of the recorded sites are stone artefacts. Other site types are stone arrangements, bora grounds, burials, scarred trees and axe grinding grooves. The archaeological record demonstrates that Aboriginal people have occupied the land now within KNP for at least 9,000 years.

All archaeological sites are vulnerable to the effects of the natural environment and increasingly post-contact human activities are a threat to Aboriginal archaeological heritage, including within the protected area system. Since most Aboriginal archaeological sites are located on or in the ground, any damage to the natural environment can also damage Aboriginal sites, especially stone artefact scatters and bora grounds (earth rings). Trampling experiments elsewhere in Australia and around the world have been able to quantify the negative impacts of animal trampling on archaeological sites. An overlay of horse population areas and AHIMS site distribution across KNP shows that the majority of recorded Aboriginal sites fall within areas identified as having horse populations.

Loss of and damage to archaeological sites is seen by Aboriginal people as disrespectful and reflecting a lack of responsibility on the part of the relevant land managers. While there are numerous activities occurring in the national park leading to damage to archaeological sites, it is important that NPWS is seen to be doing the best it can to minimise and avoid damage by activities over which it has some control.

The protection of significant ancient Aboriginal heritage sites and cultural landscapes, inclusive of tangible and intangible values, is a key concern to the Aboriginal participants. Accordingly, the damage to Aboriginal heritage sites and cultural landscapes caused by wild horses in KNP requires urgent and active management to halt and remedy.

The current awareness of wild horse management amongst the Aboriginal community is dependent upon an individual's engagement with park management, their work history and how frequently they visit the park for social/cultural purposes. The participants consider all introduced species that are doing damage to country in need of active and urgent management, including pigs, deer and rabbits, but the greatest concern relates to wild horses given their large and increasing population.

The investigation has found that the value of wild horses in KNP to the Aboriginal participants is founded in historical association and personal experience. A deep cultural heritage connection is not evident between Aboriginal people and wild horses. Wild horses have not been incorporated into the Aboriginal social system or cultural practise in this region in the same way as other introduced species have in other parts of Australia. Whilst there are shared historical associations for Aboriginal and non-Aboriginal people with horses across the region, the key feature that distinguishes Aboriginal and non-Aboriginal historical connections to horses is that the Aboriginal riders held detailed knowledge of the landscape, as custodians, which assisted them in moving efficiently through the landscape, on foot and later on horseback.

This investigation recommends a range of actions in response to the findings. Given the critical importance of water in Aboriginal society, as part of their cosmological world view and in the context of custodianship of country, a new wild horse eradication zone is recommended to protect the cultural values associated with the headwaters of the Murrumbidgee and Goobarragandra Rivers. Another new wild horse eradication zone is also recommended for the Lower Snowy River as a way to protect important archaeological sites. Both proposed zones require further definition and research.

Other recommendations include reducing the number of wild horses across the entire park to a level that ensures intangible Aboriginal cultural heritage across the landscape is safeguarded into the future; establishing a scientifically valid monitoring experiment to quantify the impacts of horses on artefact scatters and engaging Aboriginal sites officers to record new sites; enabling Aboriginal input into the 2021 draft wild horse plan of management given minimal Aboriginal participation in this investigation; facilitating community site visits to monitor the impacts of horse trampling on Aboriginal cultural heritage and to restore cultural areas; and recording and acknowledging the shared and distinguishing attachments to wild horses held by Aboriginal and non-Aboriginal people.

1.0 Background

In accordance with the *Kosciuszko Wild Horse Heritage Act 2018*, National Parks and Wildlife Service (NPWS) is compiling a new draft wild horse heritage management plan for Kosciuszko National Park (KNP). The Act requires the plan to identify the heritage value of wild horse populations in parts of the park and set out how that heritage value will be protected while ensuring environmental and other cultural values of the park are also maintained. The draft plan will be compiled with advice from a statutory Kosciuszko Wild Horse Community Advisory Panel (CAP) and non-statutory Scientific Advisory Panel (SAP). The Minister for Energy and Environment has the delegation to adopt a new plan.

A draft Kosciuszko wild horse management plan was compiled in 2016 but never adopted. Development of the 2016 draft plan involved extensive community and stakeholder engagement. However, the cultural value of wild horses to Aboriginal people, and Aboriginal input into the management recommendations, was underrepresented.

The vision of the 2016 draft Kosciuszko wild horse management is to:

...conserve the outstanding values of KNP with the support of the community through active, adaptive and humane management of wild horses to minimise their adverse impacts on natural, cultural and visitor values, while acknowledging the cultural and social values of the KNP wild horse population (Office of Environment and Heritage (OEH) 2016: 2).

The draft 2016 Kosciuszko wild horse management plan has three objectives:

1. To reduce the impacts of wild horses on the natural and cultural heritage values of KNP by reducing the overall population of wild horses using a range of cost-effective and humane control measures.
2. To reduce and mitigate the risk of adverse wild horse interactions or incidents with park visitors and the public more generally.
3. To involve the community in the ongoing management of wild horses in KNP through active participation in research, monitoring and control programs where possible.

The draft 2016 Kosciuszko wild horse management plan recognises Aboriginal significance as part of the cultural landscape of the park and that Aboriginal people used a wide range of natural resources in the mountains as food, medicine, tools, clothing, in decoration, or for ceremonial purposes. The annual bogong moth gathering was one of the most important Aboriginal cultural and social events in southeast Australia (OEH 2016: 8). Moreover, the draft plan acknowledges that the descendants of Aboriginal tribal groups that once occupied and visited the Snowy Mountains hold spiritual

attachments to the place, with traditional knowledge, family stories and memories illustrating their ongoing cultural connection with the mountains and that Aboriginal men worked for pastoralists as stockmen, drovers and station hands, and were involved in mustering and breaking wild horses (OEH 2016: 8).

The draft wild horse plan notes community concerns around the physical damage caused to Aboriginal heritage sites by wild horses through trampling and erosion of physical sites (e.g. artefact scatters) and that the presence or evidence of wild horses, as an introduced species, may conflict or detract from values associated with Aboriginal spiritual significance (OEH 2016: 18–19).

The draft plan establishes five wild horse management zone types which are broadly based on the biosecurity model, each with specific objectives and strategies. These zones are prevention; eradication; containment and population reduction; environmental asset protection; and public safety (OEH 2016: 22). Horse populations across KNP at as 2016 are also depicted (Figure 1).

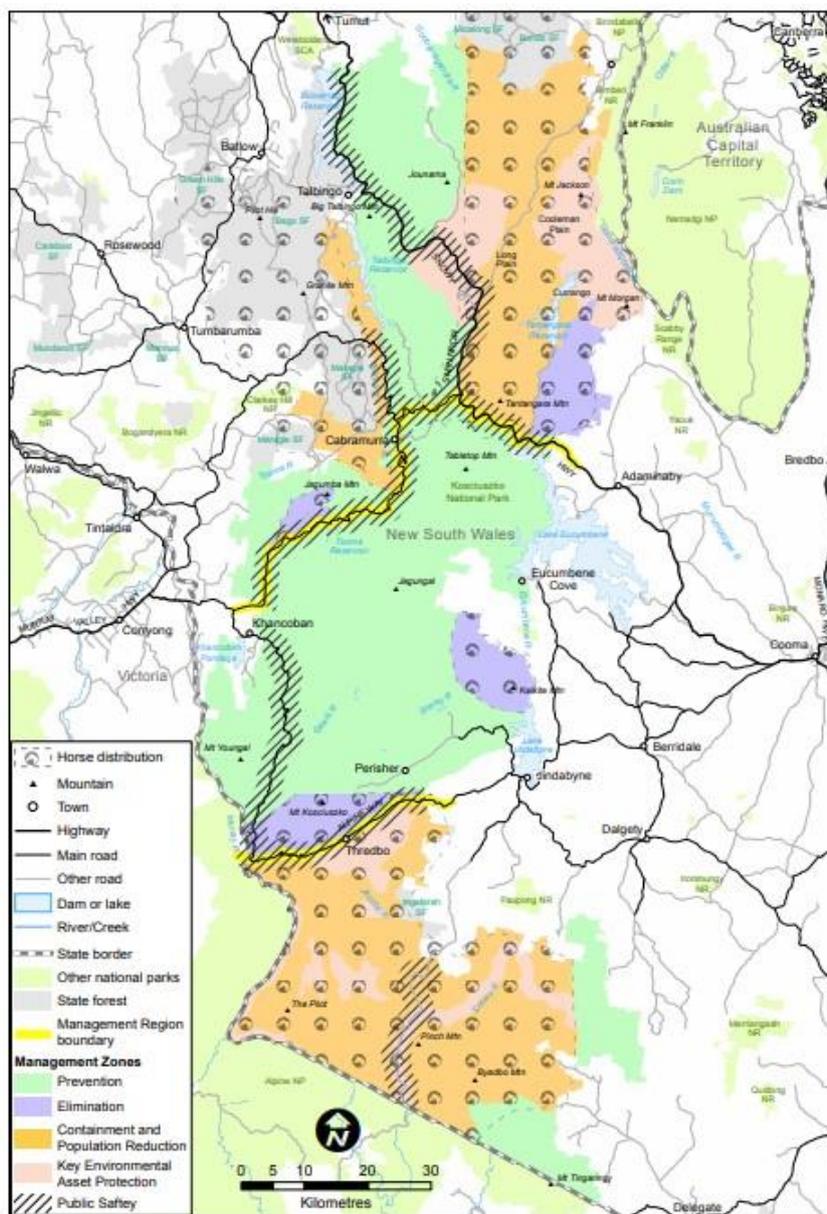


Figure 1 Wild horse management zoning map (2016)

NPWS is now seeking to improve Aboriginal engagement into the management of wild horses in the park for the next iteration of a new wild horse management plan. Anthropologist Susan Donaldson has been engaged to facilitate Aboriginal input into the management of wild horses in KNP. Archaeologist Sue Feary is undertaking a desktop review of the archaeological record.

This investigation thus contributes towards development of the draft wild horse heritage management plan for KNP and aims to improve understandings of Aboriginal people’s current awareness of wild horse management, the cultural value of wild horses and how wild horses could be impacting Aboriginal cultural heritage values within KNP. The project has also recorded community views on the importance of wild horses and on the ongoing management of wild horses in the park. This study has provided the first formal opportunity for Aboriginal people to express their views on the management of wild horses in KNP.

1.1 Research tasks

The brief for the current investigation states that the objectives of the project are to:

1. establish the current awareness of wild horse management and their impacts
2. record Aboriginal community views on the value of wild horses in the park, and
3. record opinions on the ongoing management of wild horses in the park.

To meet the objectives of the project, the consultant will be required to:

1. collect and record Aboriginal opinions and views, and
2. analyse Aboriginal opinions and views and report on their implications for management.

Interviews should be used to capture Aboriginal views and opinions on the three objectives above. Consideration needs to be given to collecting views and opinions from the wider Aboriginal community, as well as key stakeholders and locals. The consultant will be required to engage with relevant members of both the NPWS Northern and Southern Aboriginal Memorandum of Understanding (MOU) Groups. MOU group members may provide recommendations about other groups or people to interview. Notwithstanding, the consultant must engage a diversity of stakeholders, which may extend to people or groups from outside the local area. Opinions on wild horse management may relate to the broader landscape as well as protection of key sites of archaeological or ethnographic value that may be subject to impact. The consultant is to ascertain whether there is a desire for Aboriginal community involvement in management, including monitoring.

The consultant will be required to analyse the outcomes of the interviews and produce a report which articulates the value of wild horses in the park to Aboriginal people and the implications for management in accordance with the three project objectives set out above. The report will be used to provide Aboriginal intangible cultural heritage advice to the new draft wild horse heritage management plan. The final report may be supplied to the Minister of Energy and Environment as a supporting document to the new draft plan.

1.2 Methodology

Ethnography is a research method used in anthropology requiring field assessment and direct engagement with a group of people to develop an understanding of the society and culture to which they belong. The research was undertaken through qualitative methods involving one-on-one semi structured interviews.

In-depth interviews combined with background research are a good way to collect data about an individual's personal histories, perspectives, and experiences, particularly when sensitive topics are being explored. For this investigation the interview sessions aim to record views on the value of wild horses in the park and current level of awareness of wild horse management and their impacts. Aboriginal people's opinions on the ongoing management of wild horses in the park will also be recorded.

As a way to ensure Free, Prior and Informed Consent (FPIC) potential participants were made aware of the purpose of the project and how their information is to be used. An information agreement outlining these details was developed for this project (Appendix 1). A set of interview questions has been developed to guide this process (Appendix 2) and interviewees reviewed a draft transcript of their interviews prior to final approval and reporting.

Ethnographic research associated with Aboriginal cultural heritage would normally draw on participant observation to collect data on people's behaviours. This approach usually involves the physical inspection of sites with the Aboriginal custodians of the sites. Country visits with Aboriginal groups were not possible at this time due to the project time frame, the season's snow coverage and current Covid-19 safety concerns. Aerial mapping was also utilised to identify locations in cases where participants are familiar with locations but not the place name. The wild horse management zoning map (2016) was also utilised to prompt discussion about future management options.

For the purposes of this project, which focuses on a particular place (KNP) and theme (wild horses), the research method also involved a review of existing ethnographic and archaeological literature, which was used as a base to develop the interview questions.

The Aboriginal people with cultural connections to KNP reside across south-eastern Australia and not necessarily close to KNP. The selection of Aboriginal participants took place collaboratively between researchers, NPWS, existing Aboriginal organisations/groups and Aboriginal families with cultural and historical associations to the study area. Gender equity and a balance in tribal affiliation will also be achieved. The authors acknowledge that increased Aboriginal participation would have improved research outcomes.

There are five Local Aboriginal Land Councils (LALCs) whose regions include parts of KNP: Eden LALC, Bega LALC, Merrimans LALC, Wagonga LALC and Brungle–Tumut LALC. The Ngambri LALC and the Albury LALC are close by, to the northeast and to the west. These relevant LALCs have had input into wild horse management planning process through submissions to the Kosciuszko Wild Horse Community Advisory Panel (CAP).

Data collected during the literature review and interviews will be collated into a report and mapped where possible. Specific sites recorded as being significant to Aboriginal people for spiritual, social, aesthetic or historical reasons will be identified, where possible.

1.3. A note on intangible Aboriginal cultural heritage

Non-material or intangible Aboriginal cultural heritage is best understood as the value or meaning people or cultural groups give to elements across the landscape or the associations, they have with them. These places or elements may or may not have physical traits. The associated value is held within people's minds, memories and continued activities and knowledge. Whilst intangible values can be of a social or historical nature, the distinguishing feature of 'intangible Aboriginal cultural heritage values' is the cultural element such as stories of cultural events, religious significance, spirituality, the intergenerational layers of cultural connection to place, knowledge of how to maintain and use natural resources, and undertaking cultural activities. These important values can be overlooked during cultural heritage assessments, and are easily lost if not retold, captured, safeguarded and maintained.

In 2013 the *Australia ICOMOS Burra Charter* (ICOMOS 2013) broadened its definition of 'place' to encompass Indigenous places of cultural significance which may comprise both intangible and tangible values across interrelated locations referred to as cultural landscapes. The Burra Charter's definition of 'place' as a geographically defined area includes natural elements, objects, spaces and views. The definition of 'cultural significance' encompasses aesthetic, historic, scientific, social or spiritual value for past, present or future generations and the definition of 'use' relates to the functions of a place, including the activities and customary practices that may occur at the place or are dependent on the place. 'Associations' means the connections that exist between people and a place, whilst 'meanings' denote what a place signifies, indicates, evokes or expresses to people.

Whilst the term 'intangible cultural heritage' is not directly defined in the Burra Charter, the cultural practices to which it refers are encompassed by the Charter, Explanatory Notes and Practice Notes, including the ICOMOS (2017) Practise Note on *Intangible cultural heritage and place*, which covers all Australian cultural groups. In the 2017 ICOMOS Practise Note, cultural heritage is defined as:

...the diversity of cultural practices created by communities and groups of people over time and recognised by them as part of their heritage and cultural practices encompass traditional and customary practices, cultural responsibilities, rituals and ceremonies, oral traditions and expressions, performances, and the associated language, knowledge and skills, including traditional craft skills, but is not limited to these (ICOMOS 2017: 3).

The concept of a 'cultural landscape' is a relatively new one in the field of heritage conservation and management and attempts to capture both material and non-material elements. In 1996 the World Heritage Committee adopted a definition for cultural landscapes:

Cultural landscapes represent the ‘combined works of nature and of man’...illustrative of the evolution of human society and settlement over time, under the influence of the physical constraints and/or opportunities presented by their natural environment and of successive social, economic and cultural forces, both external and internal (UNESCO 1996).

The United Nations Educational, Scientific and Cultural Organization (UNESCO) also acknowledge the concept of ‘associative cultural landscapes’ of relevance to assessing and understanding Australian Indigenous concepts of land, connectedness and the concept of ‘country’ as described by the late anthropologist Deborah Bird Rose:

Country in Aboriginal English is not only a common noun but also a proper noun. People talk about country in the same way that they would talk about a person: they speak to country, sing to country, visit country, worry about country, feel sorry for country, and long for country. People say that country knows, hears, smells, takes notice, takes care, is sorry or happy...country is a living entity with a yesterday, today and tomorrow, with a consciousness, and a will toward life. Because of this richness, country is home, and peace; nourishment for body, mind, and spirit; heart’s ease...Country is multi-dimensional – it consists of people, animals, plants, Dreamings; underground, earth, soils, minerals and waters, surface water, and air (Rose 1996: 7–8).

The ‘associative cultural landscape’ encompasses the non-material values across a landscape and highlights the inseparability of cultural and natural values. Associative cultural landscapes may be defined as large or small contiguous or non-contiguous areas and itineraries, routes, or other linear landscapes – these may be physical entities or mental images embedded in a people’s spirituality, cultural tradition and practice.

The attributes of associative cultural landscapes include the intangible, such as the acoustic, the kinetic and the olfactory, as well as the visual. The range of natural features associated with cosmological, symbolic, sacred, and culturally significant landscapes may be very broad: mountains, caves, outcrops, coastal waters, rivers, lakes, pools, hillsides, uplands, plains, woods, groves, trees.¹ Truscott (2000) points out that often ‘intangible heritage’ can be seen, or heard, or tasted or smelt or felt emotionally².

Importantly, associative cultural landscapes may be valued by multiple groups, who attach different values resulting in a concurrence of cultures and uses, all of which are recognised to have validity.³ By considering Aboriginal cultural heritage values on a landscape scale, the inseparability of people and place, culture and nature, the past and the present, material and non-material values, the Aboriginal world view becomes more apparent. Seemingly isolated locations and events are understood as being interconnected.

¹ ICOMOS International Symposium 2004.

² Truscott (2000: 23).

³ US/ICOMOS, 1996.

Researchers Leader-Elliott, Maltby and Burke (2004) found that:

...a cultural landscape is more than just the sum of its physical places; it is equally concerned with the spaces between places and how these are given meaning, as well as the documentary and oral history stories that are woven around both. The deeply social nature of relationships to place has always mediated people's understandings of their environment and their movements within it, and is a process which continues to inform the construction of people's social identity today.⁴

Accordingly, from a spatial perspective, the relationship between human activity and the natural environment may not always relate to isolated locations.

The most relevant understanding of cultural landscapes and intangible cultural heritage values for this assessment is the approach developed by Brown (2010). Brown's framework is based around the context of National Parks in New South Wales (NSW) where:

...the cultural landscape concept emphasises the landscape scale of history and the connectivity between people, places, and heritage items. It recognises the present landscape is the product of long term and complex relationships between people and the environment.⁵

Brown highlights how the integration of people's stories, memories and aspirations into management processes gives recognition to the link between the landscape and people's experiences, without this, 'an impression is created that the landscape is devoid of human history'. Moreover, he found that respecting and acknowledging people's attachments supports community identity and wellbeing.⁶

Whilst theoretical understandings specific to Aboriginal concepts of cultural landscapes continue to develop in Australia, it is acknowledged that Aboriginal cultural landscapes are places valued by an Aboriginal group (or groups) because of their long and complex religious and economic relationship with that land, and importantly, material evidence of the cultural association will often be minimal or absent.⁷

⁴ Leader-Elliott, Maltby & Burke 2004; see also Byrne 2004.

⁵ Brown 2010: 4.

⁶ Brown 2012: 108.

⁷ Bugey 1999: 30; see also the Commonwealth Government's definition of Aboriginal and Torres Strait Islander heritage, as applied to heritage significance assessments (Australian Heritage Commission 1997).

2.0 Archaeological context

2.1 The archaeological record in Kosciuszko National Park

Archaeological sites are an important part of the Aboriginal cultural heritage of KNP. Based on literature review, database analysis and professional knowledge, this section describes the nature and extent of the archaeological record in the national park, together with a brief history of how it came to be recorded and known. It then discusses implications for the archaeological record of the presence of wild horses in the national park, with a focus on stone artefact assemblages, since they comprise the vast majority of recorded Aboriginal sites in the national park.

Created by Aboriginal people over millennia, archaeological sites are the physical evidence of past lifestyles and cultures. They are highly valued by Aboriginal people because they represent a direct, tangible link to the past, to the ancestors and to the ancestral beings. Archaeological sites are irreplaceable, because they reflect cultural activities such as stone tool manufacture that may not be practiced today. The archaeological record is an important source of information, as it is the sole record of the initial Aboriginal occupation of the Snowy Mountains, millennia beyond memory and settlers' records. It provides physical evidence which can be scientifically examined to help build a picture of an ancient Aboriginal past. Archaeological sites that have been systematically excavated sometimes contain material that can be dated by radiocarbon or other methods, to measure the antiquity of Aboriginal occupation and the cultural changes and adaptations that have occurred over time.

Patterns of archaeological sites across a landscape indicate where people lived and moved in relation to the resources they utilised, such as stone for tool making, plant or animal foods, and water. They can show traditional routes of movement and places of ceremony. Spatial archaeology is important for showing the relationship between where people chose to camp and certain environmental variables such as slope, elevation, vegetation or aspect. Cultural variables also played a significant part in site patterning; the presence of totemic species and the location of sacred sites, creating a cultural landscape which integrates nature and culture and combines physical and non-physical features of Aboriginal country (Brown, 2010).

Much happens to archaeological sites between the time they were created and the time they are found and recorded, sometimes amounting to thousands of years. Most organic material does not survive except under special conditions, so the archaeological record tends to consist mostly of inorganic remains such as stone tools. Added to the natural biases of preferential preservation are geomorphological processes such as sediment erosion and deposition and water runoff, which can move or bury artefacts. In the high country, frost heave – the freezing and melting of water between soil particles – can also move stone artefacts up and down the soil profile. These natural processes can affect the integrity of archaeological sites and hence their capacity to provide reliable and accurate data.

Additionally, since white settlement, many developments and activities have led to impacts on landforms containing archaeological sites. A 'High Country' example is the early grazing of cattle in alpine areas, resulting in significant erosion and causing extreme damage to fragile ecosystems (Good, 1992). Grazing by hard-hoofed animals would have caused impacts to Aboriginal sites embedded in the landscape, for example scatters of stone artefacts and earth rings. The post-war construction of the Snowy Mountains Hydro-Electric Scheme would have unknowingly disturbed and damaged archaeological sites at a time when there was no legislation in NSW for protecting Aboriginal heritage. More recently, construction of ski resorts and provision of services has also affected archaeological heritage and the proposed Snowy 2.0 scheme will have a significant impact on Aboriginal sites in the northern end of the national park.

The Aboriginal archaeological heritage of KNP as we see it today is therefore a product of not only an ancient Aboriginal society that created it but also natural and human histories that have affected its integrity and visibility. Ironically, since inception of heritage protection legislation in 1974, the majority of sites have been found and recorded in the context of assessments of the very developments that may cause their demise.

2.2 Recorded archaeological sites in Kosciuszko National Park

In NSW, the official register of Aboriginal sites is the AHIMS database, currently administered by Heritage NSW.⁸ As at September 2020, AHIMS contains just over 1,000 records for KNP (Figure 2 and Figure 3).

⁸ Formerly known as Office of Environment and Heritage, Department of Environment Climate Change and Water, Department of Environment and Climate Change, and National Parks and Wildlife Service.

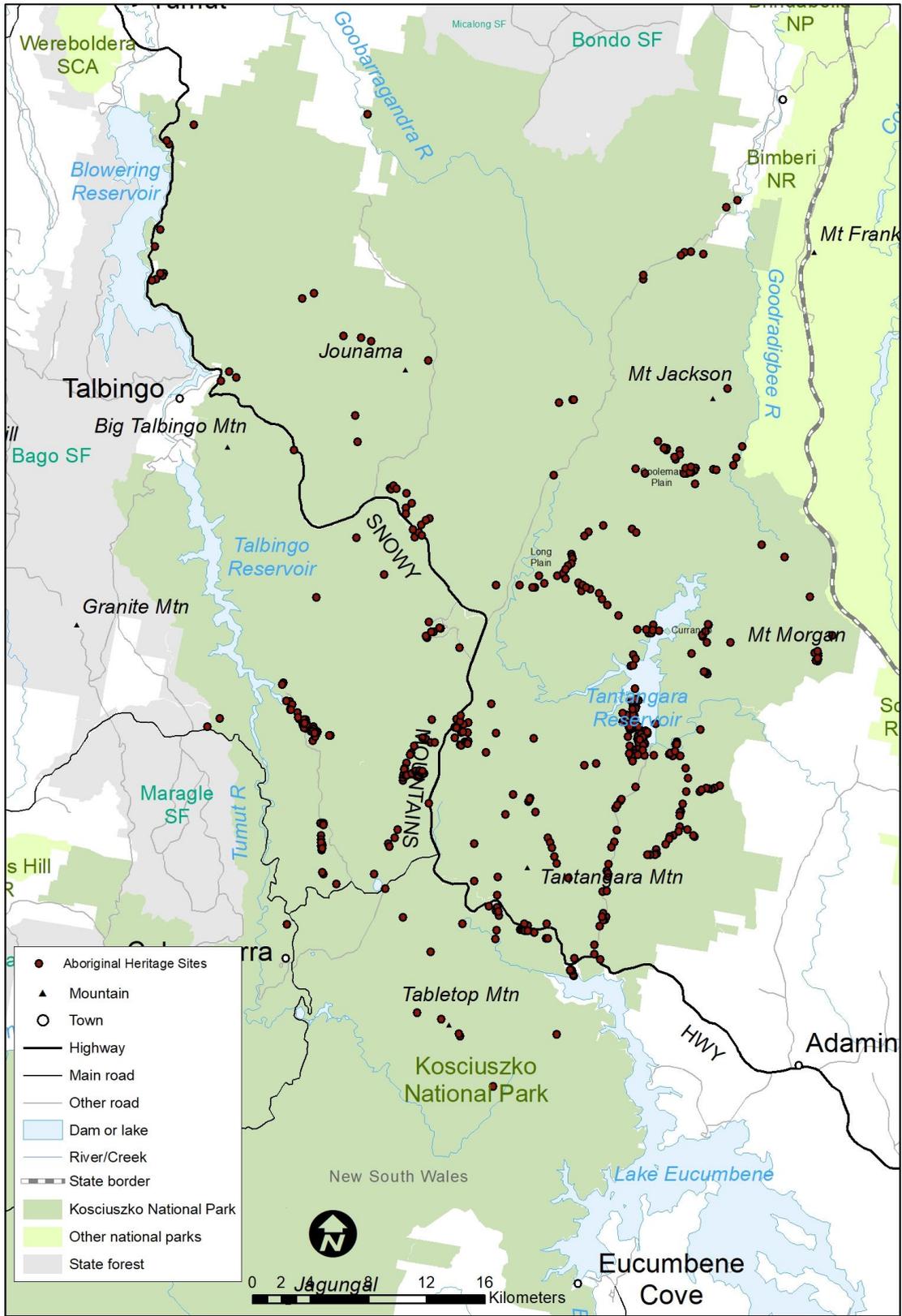


Figure 2 AHIMS sites, north KNP

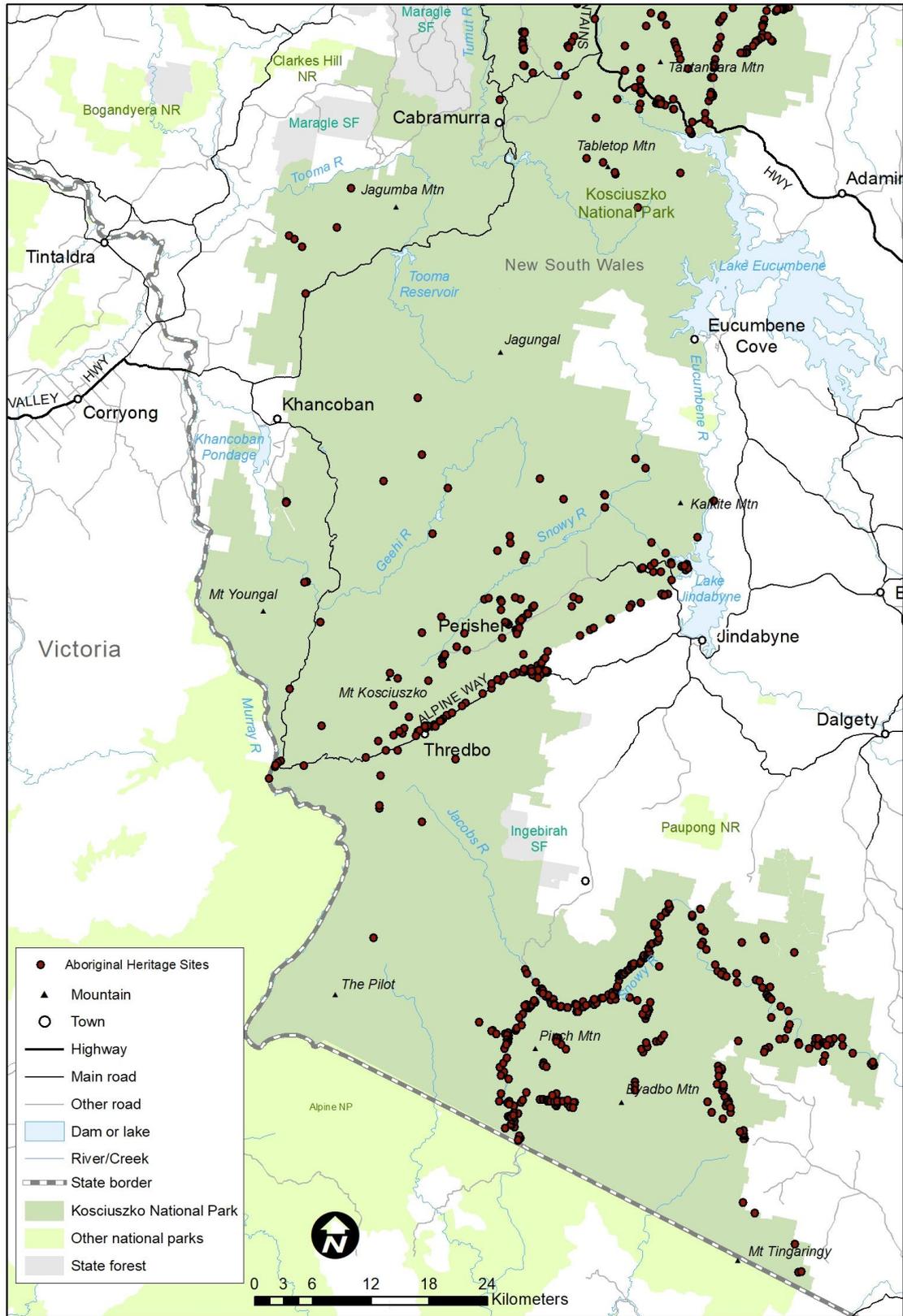


Figure 3 AHIMS sites, south KNP

This is of course not the totality of Aboriginal sites within KNP – it is just those sites that have been identified, recorded and entered onto AHIMS since its inception in the early 1980s as MINARK. MINARK (Management of INformation in ARKaeology) was a microcomputer database system specifically adapted to the scale and structure of archaeological data, designed by Ian Johnson (Johnson, 1989). It was subsequently adopted by NPWS as the official Aboriginal sites database. Over time it has morphed into the current system. AHIMS also supports an extensive catalogue of Aboriginal cultural heritage reports associated with proposed developments, regional studies and occasionally with research. This ‘grey’ literature is often the most relevant source of information when undertaking Aboriginal cultural heritage assessment projects in NSW.

Numerous Aboriginal archaeological sites are likely to be known about but have not been entered onto AHIMS for whatever reason. There are many others yet to be identified and recorded. AHIMS has many limitations, for example, there are duplications and erroneous recordings. There are also many sites with incorrect grid references, sometimes due to recorder error and sometimes due to inadequate internal administrative processes and occasionally both. Aboriginal sites also appear on AHIMS only as a single data point, even if the site covers a large area. Nevertheless, most limitations can be overcome by scrutinising the associated sites forms and reports for additional detail.

A glance at Figure 2 and Figure 3 reveals a discernible patterning of recorded sites; in particular, the extensive Wilderness Areas within the national park contain few or no recorded sites. Most sites appear to be associated with infrastructure and services and the ski resorts. This connection is a function of two main variables: legislation and geography.

The *National Parks and Wildlife Act 1974* provides blanket protections for all Aboriginal ‘objects’ in NSW. The Act establishes an assessment processes for determining whether or not Aboriginal objects are likely to be harmed by an activity. Hence, most sites are recorded in the process of undertaking assessments associated with developments, creating a distinct bias in the pattern of recorded sites.

Where sites have been recorded independently of any developments, this is often opportunistic, due to personal interest or part of research, as will be discussed in the next section. Such sites may occur in areas difficult to access due to lack of any roads or tracks and may have very low levels of archaeological visibility, due to vegetation cover.

The pattern of recorded sites as shown on a map may not, therefore, be an accurate reflection of traditional patterns of Aboriginal occupation or use. Nevertheless, when used in conjunction with other sources of data, archaeological sites make an invaluable contribution to understanding pre-contact Aboriginal culture and society.

Figure 4 is a breakdown of sites according to AHIMS categories, within KNP. Appendix 3 is a description of site categories/types.⁹

TYPE	FREQUENCY	PERCENTAGE (ROUNDED)
Aboriginal resource & gathering	1	0.1
Art	1	0.1
Artefact	842	81.0
Ceremonial ring	5	0.5
Burial	6	0.6
Grinding groove	3	0.3
Habitation structure	5	0.5
Culturally modified tree	64	6.2
Potential archaeological deposit	98	9.4
Stone arrangement	8	0.8
Quarry	5	0.5
TOTAL	1,038	100

Figure 4 Frequency of archaeological site types in KNP as at September 2020

2.2.1 Stone artefacts

Figure 4 demonstrates that artefacts comprise over 80% of all site types which is not surprising as artefacts made from stone are the most enduring component of the archaeological record. They are also the most commonly recorded site type across the Australian continent. Generally, artefacts are made from stone although tools made from wood, bone and shell can sometimes be preserved. Tools were often a combination of materials, such as a stone spear point on a wooden spear shaft, but the wood component tends not to last.

The site type/feature/category labelled ‘artefact’ can reflect many different circumstances. It can be a single, isolated stone flake, dropped or thrown away, or it can be thousands of stone artefacts spread over many square metres where tools were manufactured. It can refer to artefacts below as well as on the ground surface. It can be flaked artefacts or those that have been ground and polished to produce hatchet heads or it can be a grinding stone. Most recorded stone artefacts are ‘debitage’ i.e., the waste generated while making specific tools. The stone artefact record is biased by historic fossicking when artefacts that ‘looked good’ such as polished axe heads, were the most likely to be collected. In the region there is abundant anecdotal evidence of stone axes displayed on farmers’ mantle pieces, collected from paddocks while ploughing.

⁹ The Heritage NSW Guide to completing site forms calls these ‘features’. A site may contain one or more feature. NB: a ‘site’ is not defined in law.

Stone artefacts can tell us much about pre-contact Aboriginal society. The type of stone used can indicate trading patterns between different social groups, which may link to large ceremonial gatherings, and hint at access arrangements of different groups to stone sources. Microscopic examination can indicate what they were used for, such as plant residue on a grinding stone or blood on a spear tip.

The Snowy Mountains has a unique type of stone tool. During her pioneering research into Aboriginal occupation of the high country in the 1970s, Jo Flood noted historical references to Aboriginal use of smooth, elongated stones for grinding bogong moths to a paste in readiness for consumption (Flood, 1973). She found several such pebbles close to bogong moth aestivation sites on Rams Head Range. When microscopically examined under UV light they glowed, due to presence of protein, which Flood attributed to grinding of moths (Flood, 1973). Figure 5 is a smooth elongated stone found in 2017 which may be a moth pestle (Feary & Niemoeller, 2017). Figure 6 and Figure 7 are images of stone artefacts recorded at various locations in the national park.



Figure 5 Possible moth pestle recorded in KNP



Figure 6 Stone artefacts recorded in KNP



Figure 7 Stone artefacts recorded at Mount Selwyn, KNP

Artefacts are common across the landscape because they were produced by striking a core with a hammerstone, which produces numerous shattered pieces, most of which are discarded and never used. The toolmaker selects the pieces of stone with the right shape and size for the intended purpose and works on them until the desired shape and edge is attained, such as a spear head or spear barb or a scraper. The rest of the artefacts are termed 'debitage'.

2.2.2 Potential archaeological deposits

The next most commonly recorded AHIMS feature in KNP is a Potential Archaeological Deposit (PAD). This is not actually a feature; instead, it identifies landforms predicted by archaeologists to have potential to contain archaeological material, generally artefacts, but which are not visible due to vegetation cover or they have been buried by colluvial or alluvial sediments. Examples include flat,

elevated ground near a freshwater source that has not been disturbed over time. Sometimes artefacts visible on the surface may also indicate the presence of subsurface artefacts. PADs are usually test excavated to determine whether the prediction is valid. Results of test excavations are used to develop and refine models for predicting the presence of archaeological sites and have become an essential tool in land use planning. The vast majority of recorded PADs in KNP are the result of very recent archaeological surveys for the proposed Snowy 2.0 project (Dibden, 2018, 2019).

2.2.3 Culturally modified trees

The Heritage NSW definition of a culturally modified tree is:

Trees which show the marks of modification as a result of cutting of bark from the trunk for use in the production of shields, canoes, boomerangs, burials shrouds, for medicinal purposes, foot holds etc, or alternately intentional carving of the heartwood of the tree to form a permanent marker to indicate ceremonial use/significance of a nearby area, again these carvings may also act as territorial or burial markers (Office of Environment and Heritage , 2012).

This site type can be very difficult to distinguish from scarring due to fire, a branch coming off, or damage by something hitting the trunk. Culturally modified trees recorded on AHIMS for KNP may require further verification.

2.2.4 Other site types

Burial records

There is only one verified recorded burial in the park (Cooke 1988). Other burials listed in AHIMS are historic records and/or anecdotal information, which have not been verified. For example, recorded site with AHIMS number 61-3-0013 is a 1975 record of a stone arrangement and burials which have not been verified by further investigation or recording.

Grinding grooves

These are distinct grooves or circles produced when spears, or more often, axe heads are ground and polished. Water and a fine-grained rock such as sandstone are used in a whetstone manner to smooth and polish the surface. Figure 8 shows typical grooves in sandstone at a site on the NSW south coast hinterland. Granite and granodiorite are the predominant rock types in the national park which are generally not suitable for grinding or polishing axe heads, hence few are recorded in KNP.



Figure 8 Grinding grooves in sandstone in the south coast hinterland

Habitation structures

Heritage NSW defines this site type as:

Structures constructed by Aboriginal people for short- or long-term shelter. More temporary structures are commonly preserved away from the NSW coastline, may include historic camps of contemporary significance. Smaller structures may make use of natural materials such as branches, logs and bark sheets or manufactured materials such as corrugated iron to form shelters. Archaeological remains of a former structure such as chimney/fireplace, raised earth building platform, excavated pits, rubble mounds etc. (Office of Environment and Heritage , 2012).

This is an extremely rare site type in south-eastern NSW and it is likely that the five 'habitation structures' recorded in the national park are wrongly assigned due to a lack of definition of site types at the time of recording. At least one habitation structure (61-3-007) is a rock overhang.

Stone arrangements

Purposeful arrangement of stones in a pattern or in distinct piles is often associated with ceremonial activity. They tend to occur in remote places such as mountain tops. Stone arrangements were also recorded on the Lower Snowy River in 1981 (Geering 1981). Flood recorded a number of stone arrangements on mountain ridges in the Australian Capital Territory (ACT) (Flood 1973).

Natural patterning of stones, or arrangements resulting from historic activities such as piling up stones removed from a paddock prior to ploughing or bushwalkers' directional cairns can and have been mistaken for Aboriginal stone arrangements.

Ceremonial ring

These are raised earth rings associated with ceremonial activity, known as bunaan or bora rings. A set of bora rings in the Bogong Mountains are the most well-known, originally recorded in 1970 by Kay Margus and inspected by Flood in 1973. It is possible that AHIMS has duplicate records of the same site. The bora ground recorded by Margus at Jacobs River was later found to be a natural feature (Johnson, 1992).

2.3 Brief history of archaeological sites recording in Kosciuszko National Park

The frequency of archaeological assessment reports on AHIMS are listed in Figure 9, showing that over 100 reports have been written in relation to KNP, with over half completed during a period of frenetic ski resort development in the early 21st Century. The reduction in numbers of reports since 2010 is likely to reflect amendments to the *National Parks and Wildlife Act 1974* that added a statutory due diligence assessment process. Due diligence reports are generally not submitted for inclusion in the Regulator's report catalogue.

YEAR	NO. OF REPORTS
1970–1975	1
1976–1980	1
1981–1985	10
1986–1990	8
1991–1995	8
1996–2000	16
2001–2005	52
2006–2010 ¹⁰	19
2011–2015	7
2015–2020	3
TOTAL	125

Figure 9 Table of archaeological assessment reports on AHIMS for KNP

¹⁰ Low numbers of reports after 2010 are likely due to amendments to the National Parks and Wildlife Act in 2010 which introduced a due diligence assessment process. Ensuing reports did not need to be submitted to OEH and did not get entered into the AHIMS database.

It should be noted that except for the earliest years of heritage assessment, Aboriginal people are regularly employed to assist in archaeological surveys. Development of improved Aboriginal consultation policies from the 1990s that were enshrined in legislation in 2010 has resulted in training and employment for Aboriginal heritage officers, generally – but not always – through the LALC system. Figure 10 is an image of Aboriginal community members participating in NPWS field investigations.



Figure 10 Test excavations in the lower Thredbo Valley, 2011. Photo: Sue Feary.

The first archaeological site recordings in KNP were by two NPWS Rangers with a personal interest in Aboriginal history and heritage and with a propensity for identifying and recording Aboriginal sites, Kaylev Margus and John Gallard. From 1970, they recorded numerous sites, many of which have never been revisited. They also collected many artefacts that were deposited in the then NPWS office at Sawpit Creek.¹¹ Both also investigated historical records and spoke with local farmers about references to Aboriginal people in their family histories.

When Josephine Flood commenced her PhD in 1969 it marked an important move away from archaeologists' favoured playgrounds on the coast and single sites with deep stratified deposits (Bowdler, S (ed) , 1982). Pleistocene age burials had not long been found in western NSW, but at the time it was thought by archaeologists that Aboriginal people had not occupied or used the high country or if so, only fleetingly. Flood's pioneering research aimed to explain the nature and extent of Aboriginal occupation and use of the 'southern uplands' viz. highlands and tablelands. She set up a model using ethnographic and ethnohistoric records, which emphasised bogong moths as the driving

¹¹ There is a large collection of artefacts still held by NPWS at the Sawpit Creek NPWS office.

force behind Aboriginal presence in the high country. With a crew of students Flood undertook extensive fieldwork in the ACT and NSW mountains and tablelands, guided by a degree of predictive modelling and ethnographic data. It would appear from maps in Flood's thesis that around 60 sites were recorded, although not all are within KNP.¹² Many sites were later transcribed onto NPWS site cards by NPWS staff but locational information was often vague, incorrect or absent.

Flood's interpretations of archaeological and ethnographic data in the development of her thesis have been challenged in an academic context (e.g. Chapman 1976; Bowdler 1981; Grinbergs 1992). Recent research has challenged one theory that movement into the high country (montane zone and above) did not occur until the mid-Holocene. A 9,000-year-old date was obtained from a small excavation in a limestone cave at Yarrangobilly (Aplin, et al., 2010). In 2012, PhD research in the ACT's Namadgi Ranges included excavation of several rock shelters of which four contained basal cultural deposits dated between 5,000 and 8,000 years ago (Theden-Ringl, 2016). The dates provide an important link in establishing relative continuity in the presence of people in the high country from the Pleistocene-Holocene transition to the recent past (Theden-Ringl, 2016).

Apart from Flood's PhD research, the only other systematic regionally-based survey of archaeological heritage in the national park was conducted in 1991 (Johnson 1992). At the time only 400 sites were recorded in the national park and NPWS obtained a grant to undertake systematic survey to fill in the considerable gaps in the record. Also at the time, geographic information systems (GIS) was in its infancy as a planning tool for NPWS and the project aimed to investigate application of GIS in Aboriginal heritage management. Following an expert workshop and division of the park into eight 'archaeographic' zones, a team of archaeology undergraduate students was sent into the field for three weeks to find and record sites under the supervision of Ian Johnson. Twenty-five transects were surveyed and 80 stone artefact scatters were recorded (Johnson, 1992). Interestingly, quartz artefacts comprised only 23% of the 1,400 artefacts, which is in stark contrast to the high percentages of quartz relative to other raw materials recorded during subsequent investigations in the national park.

2.3.1 Thredbo Valley investigations

Archaeological consultancy work from the 1980s has also challenged Flood's theory that the Thredbo Valley was not utilised for movement or occupation:

So far in the Snowy Mountains the highest camp-site found lies just below the saddle of Perisher Gap at 1830m. It is the culmination of a trail of camp-sites from Jindabyne right up the open frost plains of Perisher valley, which provide an easy route to the moth localities on Mt Kosciusko and the surrounding peaks. It is noteworthy that no traces of Aboriginal presence have been found in the dense bush of the Thredbo valley, which would have been a much more difficult route to the moth peaks than the open Perisher valley (Flood, 1973).

¹² Appendices V1A and V1B, which are lists of Flood's recorded sites have been removed from the thesis.

Since Flood's work, numerous surveys have been done in the Thredbo Valley for a range of developments, which have resulted in recordings of many artefact scatters. In 1983 proposed construction of a ski tube from Bullocks Flat to Perisher Ski Resort prompted a series of archaeological investigations. David Hogg PL was commissioned to prepare an environmental impact statement (EIS) and archaeologist Katrina Geering prepared the archaeological report, noting that Gallard had recorded a large artefact scatter within the development envelope (61-3-0019) then collected the most obvious artefacts (Geering 1983). Geering recorded numerous sites within the area to be impacted by the ski tube development and interpreted the sites as a possible summer base camp and recommended salvage prior to development (Geering 1983). As part of the salvage operations, the site was re-mapped and test excavations were conducted by ANUTech, resulting in the site being interpreted as an almost continuous and relatively dense artefact scatter in the lower Thredbo valley. Part of the site was issued with a 'consent to destroy' to allow construction of the ski tube car park, while the remainder of the site was afforded some protection through remediation works by NPWS, including collection of artefacts along the walking track and repatriation on country (Feary 2008).

The Thredbo valley was the subject of numerous archaeological surveys associated with installation of infrastructure to service the Thredbo ski fields. These included upgrading and maintenance of the Alpine Way (Paton 1985; Navin Officer 1992); upgrading an electricity line (Walkington 1987); laying an optical fibre cable (Paton 1988). Archaeological sites, comprising surface scatters of mostly quartz flakes were recorded along all the routes, including some re-recordings of previously recorded sites. Consents to destroy were issued for a number of these sites, to allow developments to proceed.

In 2008 a preliminary Aboriginal heritage assessment was conducted for the Thredbo to Bullocks Flat multiuse path (Grinbergs 2008). Twenty-one sites were recorded, but many of these were a re-recording of site 61-3-0019 at the eastern end of the path. Subsequent test excavations for the bridge crossings on the path did not identify any subsurface cultural material although the investigation was limited in its extent (Niemoeller, 2011).

In 1987 extensive archaeological investigations were undertaken for the proposed Lake Crackenback Tourist Resort, located at the junction of Little Thredbo and Thredbo Rivers. A total of 661 artefacts were recovered from test excavations, being mainly quartz (96%), with flakes representing nearly 95% of the assemblage and exhibiting little temporal or spatial variation. Radio-carbon dating of charcoal samples gave a basal date of approximately 4,000 years BP (Kammaing et al. 1989). This provided the first dated cultural sequence for the Australian Alps in NSW.

In 2015 an Aboriginal Cultural Heritage Assessment (ACHA) was conducted for NPWS and Snowy River Shire for new shared paths within both KNP and around Lake Jindabyne, with a view to eventually linking them up via a bridge over the Thredbo River at the Gaden Trout Hatchery. Several recorded sites occur on or close to the proposed route options, the most significant being a granite rock feature called Curiosity Rocks, which has high cultural significance for Ngarigo people, especially women, and is a declared Aboriginal Place under the *National Parks and Wildlife Act 1974*. Systematic field survey was conducted for all route options, and 26 stone artefact locales were

recorded, with the majority being quartz artefacts in low densities. The lower Thredbo valley contained 10 isolated finds/small artefact scatters recorded on gentle spurs or flat areas above the river where bare ground was exposed. Numerous artefacts were recorded along the Pallaibo track and one artefact was recorded in the vicinity of the proposed bridge in the Gaden Hatchery grounds. During fieldwork, it was possible to realign the route to avoid the likely extent of all recorded sites in KNP. The bridge over the river at Gaden Hatchery was also relocated to avoid the known site. Four new sites were recorded on the western shores of Lake Jindabyne, including one site of at least 30 artefacts (Feary & Niemoeller, 2015).

2.3.2 Snowy River valley

The Lower Snowy River valley has also been the subject of intensive archaeological investigation since 1970 when Ranger Kay Margus recorded 17 Aboriginal camp sites on the western side of the Snowy River between Jacob's River and the Victorian border, with the largest sites occurring at river junctions. Darryl Lewis conducted further surveys for Flood's PhD and Flood concluded that the density of sites reflected a comparatively high population enjoying rich food resources and a mild climate in an otherwise harsh environment.¹³ For the six artefact scatters recorded at the Pinch/Snowy junction, Flood postulated that it was a possible stone procurement location and a possible staging place for journeys to higher peaks.

In 1981 Katrina Geering recorded 128 sites along the Snowy River within the national park, comprising mainly artefact scatters, but also stone arrangements and scarred trees. Again, the largest artefact scatters were at creek junctions. Presence of backed blades gave the sites a potential date of c. 5,000 BP (Geering 1981).

In 2003, Grinbergs carried out an assessment of Aboriginal cultural values of the artefact scatters in the Pinch River picnic area and camping ground and provided management advice to NPWS. Systematic surface surveys estimated 8,500 artefacts across the 14 camping areas and several PADs were identified (Grinbergs, 2003). Grinbergs noted that the archaeological evidence was consistent with historical records suggesting that the Snowy River valley was on a travel route to the high mountain peaks, perhaps along the ridges and spurs of Suggan Buggan Range and Charcoal Ridge (Grinbergs, 2003).¹⁴

2.3.3 Ski resorts

Numerous investigations have also been conducted within ski resort lease areas. Early surveys for the proposed Blue Cow Ski Resort included areas to be disturbed by development as well as areas considered to have potential for containing archaeological sites. These areas were mainly around granodiorite tors and possible bogong moth aestivation sites. No sites were found but it was noted that visibility was poor (Paton & Hughes 1984).

¹³ Lower Snowy River valley is in a rain shadow.

¹⁴ Feary recorded an artefact scatter on the Charcoal Ridge Fire Trail (61-6-0122).

A survey at a proposed Telecom exchange located on a knoll on the floor of Perisher Valley also failed to find archaeological material. The study area was noted as highly disturbed (ANUTech 1988). Navin (1989) examined a proposed ski slope development on the southern spurline of Mount Perisher and no archaeological sites were found. In 1989, Kinhill completed a report on the survey of selected areas for the Perisher Village Master Plan and no sites were found, although visibility was very limited.

Grinbergs conducted a survey for the Perisher Valley Sewerage Treatment Plant augmentation works in 1997. No sites were located, while the potential for subsurface deposits was considered low due to previous disturbance. Navin Officer Heritage Consultants (NOHC) (1999) conducted investigations within the Perisher Ski Resort for the proposed development and recorded five small artefact scatters and two PADs (NOHC 2000: 26).

The subsequent subsurface testing program excavated 37 pits across 11 different locations, recovering 33 mostly quartz artefacts (NOHC 2000). The results suggested that the sites represented short term occupation by small Aboriginal groups (NOHC 2000: 2). Based on this information, NOHC produced maps indicating zones of archaeological sensitivity across the resorts.

Barber (2001) undertook an archaeological investigation for NPWS at Perisher for proposed domestic water supply augmentation works. The survey identified two areas with archaeological potential which were test excavated but no archaeological material was found (Barber 2001). An investigation of a proposed chairlift upgrade for Front Valley at Perisher was also undertaken by Barber but no sites were found (Barber 2002). Also in 2002, Barber carried out a survey for snowmaking upgrade proposals within the Perisher Ski Resort. The locations of the projects were spread across Perisher, Blue Cow and Smiggin Holes management units. One new site was recorded and a known site extended in size. Further investigations were undertaken by Barber (2002c, 2003) including the area NOHC had tested as part of their Perisher Range study in 2000 (AHIMS#61-3-0093). NOHC recorded six artefacts from two of the four test pits excavated, while Barber recovered 11 artefacts from five of the 17 test pits. It was clear from the excavations that the artefacts were concentrated on the level crest of the spur; no artefacts were found on the side slopes or basal slopes. The test pits containing artefacts were within grassy vegetation and close to granite boulders that could provide some wind protection. On the Roller Coaster ski run, 12 test pits were excavated along the crest and shoulder of a spurline. The testing recovered 29 artefacts from nine of the test pits. It was concluded that the site (61-3-0075) was likely to extend across the crest of the spurline, in an open heath vegetation community, with patches of grass cover. The testing programs within the Smiggin Holes precinct also recovered stone artefacts, with 41 artefacts recovered from seven test pits. The artefact density ranged from 4 to 44 per square metre (Barber 2003). Barber also undertook a subsurface testing program for a proposed 2-hectare reservoir to hold water for snowmaking. Sixteen test pits were excavated and 23 artefacts were recovered.

In 2015, Barber conducted further test excavations for snowmaking proposals at Smiggin Holes, which recovered 51 artefacts from 13 of 25 test pits excavated on a ridge line containing sites 61-3-0073 and 61-3-0076, which had been previously excavated by NOHC. Barber concluded the site was

extensive across the ridgeline with localised concentrations of artefacts, being primary flakes made from locally obtained quartz. He concluded the site reflected seasonal occupation, reiterating Flood's 1973 hypothesis. Results of this extensive test pitting has validated, the seasonal model postulated by Flood.

In April 2008, Charlotte Pass Pty Ltd commissioned an Environmental Values report of the lease area, which included an archaeological assessment (NGH environmental 2008). Three previous studies conducted in the area revealed a single archaeological site, suggesting that either the area is of very low archaeological potential or that other factors such as disturbance and/or poor visibility hampered site detection.

Dibden developed an archaeological sensitivity model for the Charlotte Pass lease area, during which time six Aboriginal sites were recorded. These comprised stone artefact scatters of mainly quartz, and two quartz outcrops which may have been quarried. All the artefacts and possible quarries were located on the Mount Stillwell walking track. Very poor ground visibility confined site survey to the walking tracks. Dibden concluded that areas of high sensitivity comprised the ridge crest that encircles the resort area and any benched and flat areas on otherwise steep hillsides. Thus, all the recorded sites fall within the zone of high sensitivity.

Prior to repairs and improvements to the walking track and potential changes to the old chairlift, DECC archaeologists and Eden LALC carried out a survey along the track. Several artefacts, made from quartz, silcrete and volcanic stone were noted along the existing track, most associated with previously recorded sites (Feary 2008). A permit was issued to allow harm to the artefacts during repairs to the walking track.

2.3.4 Snowy 2.0

The most recent archaeological studies to be undertaken in KNP relate to the proposed Snowy 2.0 development, which involves constructing a tunnel between the Tantangara and Talbingo water reservoirs, an underground power station and major associated works. An ACHA was prepared by New South Wales Archaeology Pty Ltd for The Exploratory Works project area located at Lobs Hole and Talbingo Reservoir (Dibden, 2018). Surface survey identified 44 Aboriginal artefact 'locales' some of which may be duplicates of 1992 recordings. Test excavations were conducted despite the highly disturbed nature of sediments due to post white settlement activity including mining. A total 180 test squares were excavated within 28 transects, which extracted 2,300 artefacts, to an average depth of 40 cm. These were mainly debitage made from quartz and tuff pebbles obtained from Yarrangobilly River; however *in situ* knapping was detected in some squares. The assemblage was interpreted as a low-density scatter of stone artefacts rather than discrete sites, reflecting intensive use of the area in pre-contact times. Because Lobs Hole is located in the Yarrangobilly valley where it is less precipitous it may have offered shelter to its Aboriginal inhabitants (Dibden, 2018).

For the Snowy 2.0 Main Works assessment, Dibden surveyed 28 areas (including those surveyed in the Exploratory Assessment) and recorded 306 new sites. Of all new sites, 40% came from two

locations – Lobbs Hole and Tantangara Dam and were all in highly disturbed contexts due to previous land use such as mining. The majority of survey units had either not been previously investigated or had no recorded sites (see Figure 11). Excavation of 654 test squares revealed a total of 3,394 artefacts (Dibden, 2019).

Area	Area (ha)	SU #	Previously recorded sites	New sites	Test excavation squares	Total sites
Talbingo	24.5	2	0	0	0	0
Lobs Hole Ravine	596.2	47	11	77	180	88
Marica	323.6	10	0	4	0	4
Gooandra Hill	243.1	15	0	17	76	17
Wallaces Creek FT	4258.7	16	0	20	0	20
Kings Cross Road	104.8	7	0	0	0	0
Link Road	42.9	5	0	0	0	0
Three Mile Dam	58.1	17	0	6	0	6
Gooandra FT	300.9	23	0	2	0	2
Nungar Creek FT	41.1	6	0	3	0	3
Tantangara Dam FT	108.1	6	0	0	0	0
Tantangara Dam Rd Transmission Line	187.4	41	0	11	0	11
Schofields FT	158	28	1	18	0	19
Circuits Hut FT	74.2	30	1	13	0	14
Pockets Saddle Road	151.6	8	1	0	0	1
Port Phillip Trail	117.1	24	0	21	0	21
Tantangara Dam North	53.2	5	0	4	0	4
Bullocks Hill FT	28	3	0	1	0	1
Bullocks Hill Portal	36.3	3	0	0	0	0
Hains Hut FT	38.1	3	0	0	0	0
Tantangara Dam	517.4	23	11	70	386	81
Tantangara Road	186.8	1	2	12	12	14
Demison	42.3	6	0	3	0	3
Kiandra	91.2	4	0	0	0	0
Rocky Plains	66.1	5	0	1	0	1
Rocky Plains Tx Line	33.3	8	2	6	0	8
Nungar Creek Trail	82.8	36	0	13	0	13
Rock Forest	220	20	0	5	0	5
Total	8,185.8	402	29	306	654	335

Figure 11 Dibden survey results Snowy 2.0. Source: Dibden 2019.

In regard to these investigations, Dibden (2019) notes a large number of sites in the vicinity of her project areas that were recorded by Tom Knight for his PhD research for which information is not generally available.

2.3.5 Snowy Iconic Walks

In 2017 NPWS received funding to develop a multi-day walking track to link ski resorts and connect sections of existing tracks predominantly in the alpine and subalpine zones, with some sections descending into and along the Snowy and Thredbo River valleys in KNP. No previously recorded Aboriginal sites are on any of the alignment options, but several are located in the general vicinity and areas of cultural significance associated with natural features are also known to occur. Field survey was conducted for all new route options, with much of the route presenting poor or no archaeological visibility. A single stone artefact scatter was recorded and the majority of the alignment was assessed as having low archaeological potential (Feary & Niemoeller, 2017). A new section of the proposed walking track on the Thredbo River west of Bullocks Flat had medium

potential for subsurface cultural deposits and a methodology for test excavations was subsequently prepared.

Following completion of the ACHA in 2017, NPWS realigned two sections of the proposed route for environmental reasons and to improve the viewing amenity for walkers. The realignments are between Charlottes Pass and Guthega and between Perisher Ski Resort and Bullocks Ski Tube. The latter is an alternative to an alignment for which test pitting was proposed on the northern side of the Thredbo River (Feary 2019). These were surveyed for Aboriginal sites but none were identified and the realignments were assessed as having low archaeological potential, while noting the very poor exposure and visibility. The section of track adjacent to the Thredbo River was close to two previously recorded artefacts 61-3-0150 and 61-3-0151 and an area of low-medium archaeological sensitivity was noted.

In April 2019, NPWS made further amendments to the concept plan for Snowy Iconic Walks. These included adjustments to the two alignments discussed above, removal of the Guthega to Perisher section, and insertion of a new section from Charlotte Pass to Perisher (via Porcupine Rocks) section to replace it. A desktop assessment concluded that surveys of the adjustments were not warranted, but that the new walking track from Charlotte Pass to Perisher had some potential for containing small artefact scatters and moth pestles, associated with bogong moth harvesting.

The proposed new 9.8 m section of walking track between Charlotte Pass and Porcupine Rocks was surveyed in April 2020 and six quartz artefacts were recorded on the Rams Head Range plateau (RH1–RH6). The artefacts were located on a landform predicted to have medium potential for containing artefact scatters. The majority of the walking track had low archaeological visibility and was assessed as having low archaeological potential due to slope and drainage and/or frost hollow effects. The walking track was realigned in the field to totally avoid the artefacts, which were recorded and assessed as having low scientific significance (Feary & Niemoeller, 2020).

2.4 Potential impacts of horses on archaeological sites

2.4.1 Background

Nearly all archaeological sites are vulnerable to damage and disturbance from natural processes, such as weathering of art sites, or movement of artefacts due to water runoff. Humanly induced processes also cause damage and there is an extensive literature on the subject. Taphonomy is the study of the processes, both their nature and impacts, which affect a place or an object over time, particularly the time that passes after an object was buried or discarded (Schiffer 1983). Taphonomic processes include the effects of water or wind on a landscape, possibly causing erosion or deflation that can move or obscure objects that have been deposited (Schiffer 1983; Fanning & Holdaway 2001; Fanning et al. 2008). The activity of humans, animals and insects can also move or obscure objects, damaging or destroying the relationship between the object and the original depositional

context. Understanding the taphonomic processes in play at a particular location facilitates a deeper understanding of both the artefacts at a specific location and the site in general (Hiscock 1985).

It is generally accepted that post-depositional processes may alter or erase spatial patterns in the archaeological record and may even create artificial ones. It follows that the behavioural interpretation of spatial patterns can only be made after the processes that shaped the artefact patterning are understood (e.g. Binford 1983; Schiffer 1983). Some archaeological sites are more resilient than others to taphonomic processes, for example axe grinding grooves are more resilient than earth rings, simply because of the materials utilised in their creation.

Prior to white settlement, archaeological sites in the high country would have been disturbed by natural processes including impacts of native animals such as wombats digging holes in an artefact scatter, mobs of kangaroos lying on an artefact scatter or wildfire shattering stone artefacts. The potential for disturbance increased dramatically following white settlement. In the high country, summer cattle grazing from the 1830s exacerbated erosional processes (Good, 1992). Gold mining at Kiandra, construction of the Snowy Mountains Hydro Electric Scheme, development of ski resorts, construction of ski lodges and associated infrastructure, provision of services and roads and NPWS facilities are examples of activities that may damage archaeological sites.

It should be noted that the practice of archaeological investigation itself can also result in damage and loss of integrity. Collection of artefacts and test excavations and salvage are common place mitigation practices advocated by Heritage NSW. While this is often necessary to allow for development to proceed, it removes archaeological heritage from its environmental context and thus diminishes its value to both Aboriginal and non-Aboriginal people.

Archaeological sites most likely to be directly impacted by ungulates (hoofed animals) are those on the ground, such as artefact scatters, stone arrangements, earth circles and burials – and PADs can also be impacted. It follows that the greater the number of horses the greater the damage to artefacts and other sites located on the ground.

2.4.2 Trampling studies

The most obvious way in which wild horses can impact Aboriginal sites in the national park is by trampling stone artefacts located on routinely used routes of movement or at locations where they gather to feed, lie down or roll. There have been no quantitative studies of the impacts of horses trampling on archaeological sites in Kosciusko NP. However, there have been studies elsewhere in Australia and overseas that can inform an understanding of horse impacts on archaeological sites in the national park.

Trampling experiments generally examine three key factors: horizontal displacement of artefacts, their vertical displacement, and artefact damage. Early research tended to focus on effects of human trampling (Stockton 1973; Neilson 1991) but more recent studies have been concerned with the effects of animal trampling.

In the Jurreru River Valley, South India, Eren et al. (2010) tested animal trampling effects on stone artefacts in wet and dry substrates using both goats and water buffalo to trample the artefacts to examine both displacement and damage (Figure 12). Data analysis of trampled artefacts showed horizontal movement of 20–20 cm, which was comparable to similar experiments elsewhere in the world. Vertical displacement differed according to soil saturation; artefacts moved downward in saturated soil and upward in dry soils. Little damage occurred to the artefacts, which was in contrast to similar experiments by other researchers (Eren, et al., 2010).



Figure 12 Trampling experiments with cattle in India. Source: (Eren, et al., 2010)

In an experiment conducted in the Great Plains, USA, Douglass and Wandsnider examined displacement and damage to stone artefacts by cattle in three dry substrates of varying degrees of compaction. The authors also found that artefacts in dry, loose soils were pushed below the ground surface by cattle trampling, and were susceptible to damage in all three substrates, but also that fragmentation did not increase over time (Douglass & Wandsnider 2012).

Pargeter conducted an experiment in Malawi, looking at how cattle and humans can be responsible for macrofracture of stone tools. The results concluded that cattle were the main reason stone tools were broken (Pargeter 2011). Animal trampling experiments over a longer term, using cattle and horses, were conducted in northern California. Cameras were set up to measure the activities of animals in low, medium and high intensity trampling situations. Statistical methods were used to show that high intensity trampling caused artefacts to disappear and to move horizontally in a non-random fashion (Schoville, 2019).

Stone tools can exhibit traces of damage caused by several post depositional processes, one of which is trampling. Edge damage provoked by trampling, be it of animal or human origin, is sometimes interpreted as human-made retouch. Balirán (2014) established experimental plots to understand the potential effect of animal trampling on surface lithic artefacts. The plots were located on a cattle ranch in La Verdadera in Argentina. An aim of the study was to identify ways of distinguishing between edge damage on artefacts caused by trampling and that due to humans using or modifying the artefacts (Baliran, 2014) (Figure 13). Pargeter and Bradfield (2012) studied the trampling effect of goats in a sandy-loam soil in dry conditions, looking for damage to stone artefacts on the surface and at depths of up to 6 cm. Common outcomes included small scars, half-moon fractures and crushed notches, as well as vertical and horizontal displacement (Pargeter & Bradfield 2012).



Figure 13 Experiments of trampling on artefacts. Source: Baliran 2014.

The experiments were able to demonstrate that animal trampling caused damage to artefacts and also that it was possible to distinguish, at a micro level, between taphonomic trampling and human produced artefact edge wear (Baliran, 2014).

In Australia where livestock, such as sheep and cattle, have been present since 1788, stock trampling has been shown to not only impact the environment, but also destroy the integrity of an archaeological site. An archaeological investigation of taphonomic processes was conducted at Cuddie Springs in NSW and a number of factors affecting the site including wind, human impact, and livestock were recorded (Field 2006). In her examination of lithic assemblages associated with late Holocene mounds in the Lower Murray valley, Joanne Thredgold concluded that animal trampling led to both breakage of stone artefacts and their downwards displacement in the soil profile (Thredgold,

2017). A study of artefact displacement was undertaken at five locations in the New England Tablelands (Howard, 2016). As part of this study, mock artefacts were placed in the landscape, monitored and detected with a metal detector to better track their movement. To better understand artefactual movement and site integrity, this experiment was conducted monthly for six months. One of the main factors that affected the artefacts over a six-month period was found to be animals, particularly cattle (Howard, 2016).

A review of trampling studies has demonstrated that distortions to the archaeological record can be measured and proven. Such distortions pose serious implications for use of artefacts scatters in developing an understanding of an ancient Aboriginal past in the high country.

2.4.3 Recorded disturbance to archaeological sites by horses in Kosciuszko National Park

Although there have been no quantitative studies of the impacts of horses on archaeological sites in KNP, observations have been made by archaeologists conducting Aboriginal cultural heritage assessments. There is also a reference to disturbance by cattle dating back to 1927 on the site card (56-6-0011) for an earth ring in the Bogong Ranges ‘cattle had pawed and trampled them [the earth rings] till they were only faintly discernible’ (56-6-0011 site card).

As discussed previously, Alistair Grinbergs conducted a detailed assessment of archaeological sites within the popular Pinch River camping and picnic area at the junction of the Snowy and Pinch Rivers (Grinbergs, 2003). His report noted that both wild and domesticated horses were disturbing the artefact scatters. His review of the severity of potential impacts against the observed conditions in the camping area identified that horses had a medium negative impact on the artefact scatters and a high impact if human remains were present (Grinbergs, 2003). Grinbergs made a number of recommendations in regard to reducing the impacts of horses in the camping area including restricting riding to formed management trails and constructing a formal horse yard to be located in an area of low archaeological sensitivity (Grinbergs 2003).

In 2005, Grinbergs assessed the impacts of the 2003 bushfires on Aboriginal sites within the national park (Grinbergs 2005). He noted that the large artefact scatter (61-6-0007) on the Alpine Way was being impacted by wild horses.

Julie Dibden makes specific mention of disturbance to Aboriginal artefact scatters by horses in her report on proposed Snowy 2.0 developments. Dibden (2019) notes specific damage by wild and/or domesticated horses to recorded artefact scatters and their environmental setting at the following locations:

- Gooandra Fire Trail
- Schofield's Fire Trail
- Port Phillip Fire Trail
- Bullocks Hill Fire Trail
- Tantangara Dam
- Nungar Creek Trail.

2.4.4 Discussion

Archaeological sites make a critical contribution to the overall Aboriginal values of KNP. Apart from their social value as direct, tangible evidence of a past Aboriginal presence, the information derived from archaeological sites is important for understanding the long Aboriginal history of high-country occupation and use. In many situations, archaeological sites are geographically connected to non-archaeological sites, forming a cultural landscape.

The section (2.4.2) on trampling shows that disturbance to archaeological sites reduces their capacity to reveal important, accurate information about the Aboriginal past.

Wild and domestic horses are just one of many factors impacting Aboriginal heritage located on and under the ground and over time the cumulative effects will be profound. Some factors are unlikely to be halted or diminished, but mitigation processes can be put in place in regard to Aboriginal heritage.

National parks are managed through legislation and policies that have the capacity to not only avoid damage to Aboriginal heritage (including archaeological sites) but also to actively protect it.

Loss of and damage to archaeological sites is seen by Aboriginal people as disrespectful and reflecting a lack of responsibility on the part of the relevant land managers. While there are numerous activities occurring in the national park leading to damage to archaeological sites (e.g. Snowy 2.0), it is important that NPWS is seen to be doing the best it can to minimise and avoid damage by activities over which it has some control.

3.0 Ethnographic context

3.1 Early ethnographies

Based on the work of Lhotsky (1835), Curr (1887), Helms (1896), Howitt (1904), Mathews (1898) and others, anthropologist Norman Tindale found that the Snowy Mountains region was within the Walgalu, Djilamatung and Ngarigo tribal areas (Tindale 1974, see Figure 14).

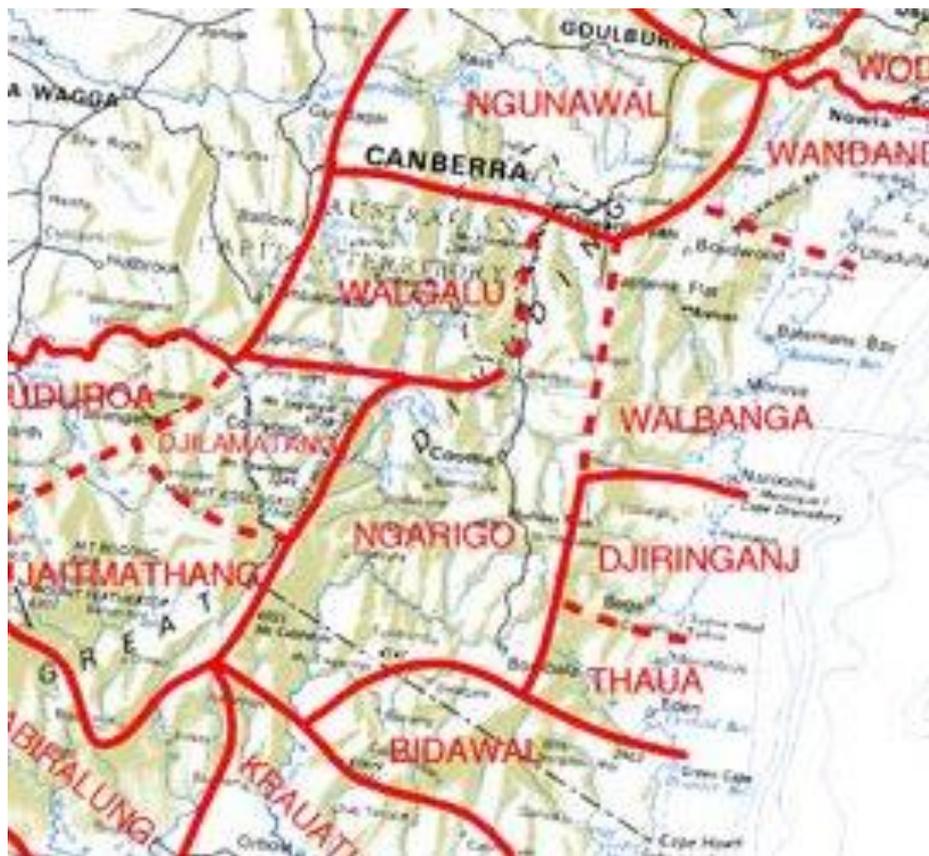


Figure 14 Excerpt from Tribes of Australia. Source: Tindale 1974.

Tindale found that the Ngarigo people occupied the Monaro tableland north to Queanbeyan; Bombala River from near Delegate to Nimmitabel; and west to the divide of the Australian Alps (Tindale 1974). He also found that because Ngarigo country also included the Monaro tablelands they were often referred to as the Monaro tribe. Earlier Mathews (1904) described the 'Ngarrugu' territory as being:

...the area from Queanbeyan, via Cooma and Bombala, to Delegate. Adjoining the Ngarrugu on the north from Queanbeyan to Yass, Boorowa and Goulburn, was the Ngunawal tribe. Adjoining the Ngarrugu on part of the west was the Walgalu and westerly again of the latter was the Dhudhuroa...on part of the south, the Ngarrugu was bounded by the Birdhawal tribe.

Tindale describes the Walgalu tribal area as including the headwaters of the Murrumbidgee and Tumut Rivers, Kiandra, south to Tintaldra and north-east towards Queanbeyan. Walgalu people are also believed to have utilised lands to the south including Mount Kosciuszko, Cobberas and The Pilot for ceremonial and social purposes (Howitt 1904: 78). Interestingly, Howitt also found that Walgalu territory included Mount Kosciuszko, an area Mathews identified as Ngarigo. Howitt's findings in relation to Mount Kosciuszko are not reflected in Tindale's map. Howitt (1904) found there to be a functional name distinguishing the Aboriginal people of the Kiandra area; they were known as Bemeringal or mountaineers, who lived on the high mountains Bemeringal, meaning from Bemering [=mountain].

Tindale describes the Djilamatung tribal area as being located west of Mount Kosciuszko and on the upper headwaters of the Murray River. He found that the neighbouring tribes, Jaitmathang, Walgalu and Ngarigo, united to exterminate the Djilamatung people (1974). According to Tindale, the Ngarigo are thus neighboured by the Ngunnawal to the northeast, the Walgalu to the northwest, the Bidwell to the southeast and the coastal groups to the east. The Walgalu are neighboured by the Wiradjuri to the west, the Ngarigo to the south, and the Ngunnawal to the northeast.

Historical records reveal that multiple groups frequented the Snowy Mountains for a variety of reasons on a seasonal basis, including to collect and consume bogong moths. Large-scale gatherings took place between the Aboriginal custodians of the Snowy Mountains and their neighbours. Wilkinson documented a gathering on the Yallowin run in the Tumut River valley in 1840 (Wilkinson 1970 cited in Knight 2010):

The blacks used to come in from Yass, Wallaregang, Omeo and Mitta Mitta and hold corroborees at Yallowin. I have seen 300 there at one time...On a hill in front of Yallowin there still remains the mark of a ring made by a blackfellows' corroboree. The corroboree made men of the youths after they had attained a certain age.

The 'man-making' ceremonies at Yallowin involved a subsequent phase of movement to the Bogong Mountains where other sites were incorporated into the ritual activity (Knight 2010). In a study of the Aboriginal cultural heritage of Kiandra, archaeologist Tom Knight suggests that Kiandra lies roughly mid-way between the significant places of the Bogong Mountains and Jagungal and may well have existed as an Aboriginal access route between them and other known ceremonial sites in and around Wolgalu country such as those near Yarrangobilly, Tantangara and the upper Goodradigbee River valley (Knight 2010).

Helms recorded 'a favourite camping place of the natives', 'not far below Jindabyne, where the valley of the Snowy River somewhat narrows between rather rugged hills' (1895: 403). Helms states that the site was used by 'natives who assembled here in considerable numbers, mainly for the purpose of making stone implements' (1895: 403). Helms also recorded a 19th Century Aboriginal grave near Jindabyne (Figure 15).

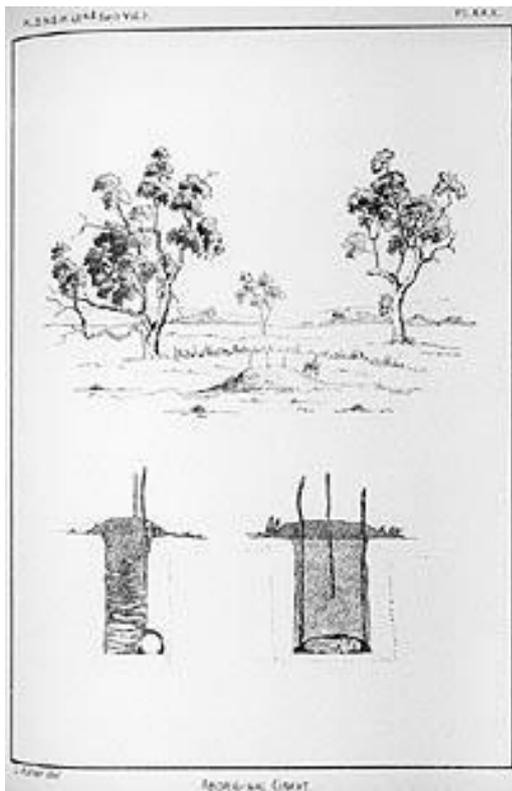


Figure 15 Historical Aboriginal grave near Jindabyne. Source: Helms 1895.¹⁵

Helms recorded information from early settlers describing Aboriginal people's annual summer migration to the Snowy Mountains to collect and consume bogong moths. Unfortunately, he does not provide a description of specific meeting places, but he does detail the associated practises, as noted below:

...early as October, as the snow had melted on the lower ranges, small parties of natives would start during fine weather for some of the frost-riven rocks and procure 'Bugongs' for food. A great gathering usually took place about Christmas on the highest ranges, when sometimes from 500 to 700 aborigines belonging to different friendly tribes would assemble almost solely for the purpose of feasting upon roasted moths. Sometimes these natives had to come great distances to enjoy this food, which was not only much appreciated by them but must have been very nutritious, because their condition was generally improved by it and when they returned from the mountains their skins looked glossy and most of them were quite fat (Helms 1895).

MacInnis describes the practises associated with moth consumption continuing into the 20th Century, including the mass migration to and from the Snowy Mountains:

¹⁵ Source: <http://www.powerhousemuseum.com/hsc/snowy/impact.htm>

These people were not wont to move in a body, but rather in a manner which reminded me at the time of the Exodus – silently, on a broad front, and overlooking nothing edible when the flight of the Bogongs ended, the rovers retraced their steps, in the same formation and manner – down from the mountains, across the rivers in scorn of the bridge, and so back to northern Monaro or perhaps down to the coast (MacInnis n.d.).

More detailed records show that the Ngarigo, the Ngunawal, the Gunai-Kurnai, the Yuin and the Walgalu all harvested moths in the Snowy Mountain region. Payten (1949) described these gatherings based on accounts of settlers on the Monaro in the following way:

From Eden, Bega, Braidwood, Tumut, the Upper Murray and Gippsland the tribes wended their way to the tablelands and thence to the foot of the main range. Here a halt was made to observe certain formalities before commencing the feast of several months' duration, usually November, December and January. For these three months the aborigines feasted on the moth, to them a great delicacy and a food which was both plentiful and easily acquired. The excursions of these tribes and groups were contrary to the usual fixed tribal boundaries and knowing the ways of the Aboriginal we would expect that such a migration would be carried out under proper rules and procedures (Payten 1949).

Flood (1980) synthesised ethnographic information associated with Aboriginal people collecting bogong moths from rock crevices in the highest peaks of the Snowy Mountains during the summer months, and grinding them into a paste in the Perisher Valley, amongst other places. She recorded possible 'moth pestles' near moth aestivation sites on the Main Range, at 2,000 metres asl. Subsequent research has suggested that Flood may have overemphasised the reliance on moth consumption, and that the tubers of the daisy yam (*Microseris scapigera*), would have been a more reliable staple food, with bogong moth harvesting restricted to special and infrequent ceremonial occasions. However, bogong moth ceremonies are prevalent in Aboriginal oral traditions.

Kamminga has suggested that the Ngarigo occupied a year-round camp at Wollondibby during the early years of European settlement. He refers to the ethnographic record of a ceremonial ground being 'a low circle of stone located near the junction of the Snowy River and Wollondibby Creek...now submerged under a modern reservoir, Lake Jindabyne' (Kamminga 1992: 108–113). Interestingly, Payten (1949) recorded stories in the late 1940s about how 'Wallendibby was a corroboree ground where NSW and Victorian blacks met on the migration onto the tops for the annual festival of the Bogong Moth'.¹⁶

Gatherings of people, in large or small numbers require travel, movement from one's base to the meeting place. Early descriptions of 'footpaths' reinforce the fact that a complex network of Aboriginal tracks existed across the region prior to European incursion¹⁷.

¹⁶ See also Val Chapman's work around Jindabyne.

¹⁷ See Blay & Cruse (2004)

Howitt explored the high country, heading to Mount Kosciusko from Tom Goggin via a ridge overlooking Leather Barrell Creek. He observed an existing track, as described below:

...a very old mark made by the blacks who used this very track in going to Maneroo; it was a piece of bark taken off a tree. A little beyond was a new mark...and then found ourselves on the old black's trail – a dim half obliterated track through the grass and bushes such as would be made by bare feet (Howitt 1866 quoted in Young 2005: 227).

Flood later found that the Snowy River valley was a route for Aboriginal people travelling from coastal Victoria to the Snowy Mountains for the bogong season and identified a number of river crossings including at Dalgety and Currowang Creek (Flood 1980: 116). The Snowy River valley is rich in archaeological sites (see Section 2). Kabaila (2005: 29) found that it is probable that Aboriginal men travelled up the Snowy River valley from Kalkite to harvest the bogong moth at Dicky Cooper Bogong and Mount Twynam. Other moth gathering sites noted by Kabaila (2005: 138) include Brindabella Ranges, Bogong Peaks, Talbingo, Mount Jagungal, Mount Kosciusko, Thredbo Valley and Brassy Mountains. Wesson's research identified Kalkite as an important meeting place and Big Bugong (Toolong Range) as a ritual site associated with accessing higher alpine regions for moth collection (Payten in Wesson 2000: 123).

The knowledge held by Aboriginal people themselves has also been used to determine site specific cultural significance. A Yuin–Ngarigo man recalls his ancestor was a great horseman involved in the brumby trade. He made the annual expedition to eat Bogong moths and to perform the Bogong moth ceremonies. These Bogong moth routes went from Delegate, onto the Snowy River and up into the mountains, using the small creeks as pathways (Kabaila 2005: 31).

The ethnographic record contains minimal data about the mythological significance of the Snowy Mountain region.¹⁸ Robinson recorded a story about the origin of a water course; the precise river was not named:

The Moon made the rivers, took a large quantity of sea water to the mountains beyond Maneroo on its journey among the mountains it was scented by the Water Mole which smelt the water when the Mole rested. The Moon went a long long way and the Water Mole still tracked on and finding the Moon asleep struck a yam stick into the water, where it gushed out and formed the river, and the Moon was thus 'kubbah bid sulky' (Robinson in Clark 2000: 156).

More specifically, the Snowy River was found by Howitt to be integral in Ngarigo burial and mourning customs. The family of the deceased would ensure they crossed the river, to the bank opposite that of any recent burials to ensure the spirit of the deceased did not follow them (Howitt 1904: 461). Howitt also recorded a number of important Walgalu and Ngarigo tribal totems, integral in organising Ngarigo and Walgalu society in relation to kin and country, as detailed in Figure 16 and Figure 17.

¹⁸ Young recorded the mythological significance of the Snowy Mountains [see 3.2 below].

NGARIGO TRIBE TOTEMS AS RECORDED BY HOWITT 1904

MOIETY	TOTEM SPECIES
<i>Merung – Eagle Hawk</i>	Bellet-bellet – lyre-bird
	Nadjatajan – bat
	Bulemba – flying squirrel
	Mundarung – tuan
	Mumung – black snake
	Mulan or Munja – a fish
	But-the-wark – the mopoke
	Kauunga – black opossum
	Waat – red wallaby
<i>Yukembruk – Crow</i>	Bra-ar-gar – a small hawk
	Tchuteba – rabbit-rat
	Baua – flying-squirrel
	Burru – kangaroo
	Berribong – emu
	Budaluk – lace-lizard
	Kuriur – native companion
	Kuar – spiny ant-eater
	Ulunbau – sleeping lizard

Figure 16 Ngarigo tribal totems. Source: Howitt 1904.

WOLGALU TRIBE TOTEMS AS RECORDED BY HOWITT 1904

MOIETY	TOTEM SPECIES
<i>Malian – Eagle Hawk</i>	Ebai - hawk
	Mari - Dingo
	Wutherin – flying squirrel
	Bellit-bellit – lyre-bird
	Nadjatajan – bat
	<i>Banda – kangaroo</i>
<i>Umbe – Crow</i>	<i>Nuron – emu</i>
	Megindang – wombat
	Maralang – brown snake
	Biringal – a star
	Maniyuk – bandicoot
	Wandeli – spiny ant eater
	Tchuteba – rabbit - rat

Figure 17 Wolgal tribal totems. Source: Howitt 1904.

These early records reveal that that Aboriginal society associated with the highest terrain in Australia was dynamic and complex; places were named, a network of pathways and meeting places were formed and rituals were regular. Given culture transforms over time, the tribal boundaries and totemic affiliations recorded in the early 1900s may or may not reflect contemporary cultural associations to land¹⁹. More recent anthropological research into Aboriginal society across Australia reveals complex systems of group interconnectedness across large cultural blocks which ensured that no one group existed in isolation from their neighbours. As noted in section 3.2 below, Ngannawal, Wiradjuri, Ngyimpaa, Ngarigo and Walgalu people were all involved in the formation of the KNP Plan of Management.

3.2 Kosciuszko Aboriginal Heritage Study

As part of the 2001 review of the KNP Plan of Management the Department of Environment and Conservation NPWS initiated the Kosciuszko National Park Aboriginal Heritage Study (KNPAHS) as a way to better understand ‘the diverse range of attachments contemporary Aboriginal communities have with the park’ (Sale 2004).

¹⁹ See Sutton (2003)

The study was undertaken between 2002 and 2004 and involved broad Aboriginal consultation and involvement, a plan of management review process, oral history collection and landscape mapping, historical research, building relationships and other initiatives (Sale 2004). A project steering committee was established as was an Aboriginal Working Group to represent a range of tribal interests including Ngunnawal, Wiradjuri, Ngyimpaa, Ngarigo and Walgalu (see section 3.3). An Aboriginal contact database was established for the first time and a newsletter known as 'Mountain Messages' was developed and regularly distributed.

The cultural landscape mapping component of the KNPAS resulted with minimal community input which Sale surmises could be a reflection of people's broad rather than specific place-based knowledge, combined with people's unwillingness to share important cultural knowledge with a government agency (Sale 2004: 22).

Challenges associated with the KNPAS included the large geographical area where custodians resided, lack of time and funding limitations, differing levels of knowledge about the mountain, community division, and the concurrent native title process.

Relevant KNPAS recommendations include:

- employment of an Aboriginal liaison officers for KNP
- keep any registered native title applicants informed
- maintain an Aboriginal contact data base
- continue to produce 'Mountain Messages' (newsletter)
- consult with Aboriginal communities to the west of the park
- develop an implementation program for Aboriginal Heritage Strategies
- ensure Aboriginal people have an ongoing role in implementing the PoM
- undertake a larger scale oral history project park wide
- undertake cultural mapping
- integrate documentary and oral history records for the park
- develop and deliver cross cultural training to parks staff
- progress Welcome to Country project
- progress name restoration project.

Many of these recommendations have been implemented by NPWS.

Kate Waters undertook the oral history component of the KNPAS which was completed in 2004. The oral history report was intended to be transformed into a publication similar to other NPWS publications being done at the time, but further oral history recordings were required, as was funding (Sale 2004: 21). Waters interviewed Monaro-Ngarigo and Walgalu-Wiradjuri people, all of whom were connected with the landscape incorporated into Kosciusko State Park in 1944 (2004).

The oral history collection is rich in describing cultural connections and historical associations across the Snowy Mountains and the surrounding landscape. People were based at the Delegate Reserve to the southeast of the Snowy Mountains, at Brungle Reserve to the north west and other small towns surrounding the range. A Ngarigo ancestor was born on the banks of the Snowy River in the 1930s (Waters 2004: 34). A common theme in the stories collected was the intergenerational pain caused by being forcibly removed from homelands, from country and the desire felt by those interviewed to return. It is not certain if families were moved off country that has become KNP.

Waters found that Aboriginal people were involved in a wide range of work in and around the mountains including 'brumby running' on horseback from Brungle to Dalgety via Red Hut. The brumbies would be captured in the mountains, broken-in and sold; the process took about one month (Waters 2004: 53). Horses were a big part of the Brungle community life in particular, as most people didn't have a vehicle. Some of the horses at Brungle were captured in the mountains, broken-in overtime and used on a daily basis, even as 'kids ponies' (Waters 2004: 54). Aboriginal people based at Corrowong to the southeast of the mountains were also involved in breaking in brumbies for future use as stock horses (Waters 2004: 54).

The oral histories also revealed how Ngarigo ancestors were involved in 'snaggin' where logs were hauled out of the Snowy River and used for fencing and building cattle corrals; often this work was unpaid, the workers being provided with rations such as clothes and food (Waters 2004: 46). Ngarigo and Wiradjuri ancestors worked as police trackers often searching for lost cattle, lost people or criminals in the alpine region (Waters 2004: 14, 47). Wattle bark was collected by Aboriginal people across the region and sold to tanneries. The method for treating leather was based on Aboriginal people's preparation of possum skins for clothing (Waters 2004: 45). A Walgalu ancestor was assistant manager at Kileys Run, which provided a means to live on his traditional lands as well as participate in the new local economy (Waters 2004: 49). A Ngarigo family lived at Little Popong working as sheep shearers and station cook, again being able to maintain connection to traditional lands (Waters 2004: 49). Other forms of employment taken up by Aboriginal people in the region include ring barking, shed work, fruit picking, railway construction, fencing, track building, forestry, council gangs and domestic duties (Waters 2004: 56).

Confirming the many ethnographic references to these places, Waters documented how Blowering and Yellowin Bay are considered important ceremonial sites (Waters 2004: 67–68); goannas and echidna remain important totemic species for the Wiradjuri–Walgalu (Waters 2004: 42) the Milky Way embodies the smoke of ancestral fires; and smoking ceremonies continue to be undertaken to connect people to their ancestral past (Waters 2002: 74). There are places where ancient human remains have been returned (Waters 2002: 75) as well as other key places of cultural and or historical value including Delegate Reserve, Brungle Reserve, Corrowong, Popong, Yellowin Bay, Micalong Swamp, The Snowy River, Blowering, Yarrangobilly Caves and Bogong Peaks. Some of these places are within KNP.

Participants in Water's oral history program also spoke about the future and management of KNP. A few key points include:

- the need for male and female Aboriginal sites officers
- the need for a cultural heritage management plan which enables sites to be protected as well as intellectual property rights
- the ongoing involvement of Aboriginal custodians in park management
- the formation of a community structure inclusive of all interests
- the inclusion of Aboriginal place names, and
- the need for Aboriginal tour guides.

Another component of the KNP AHS was NPWS archaeologist Phil Boot's review of historical documents relating to Aboriginal occupation of the region that now includes the northern and western parts of KNP (2004). Boot thoroughly investigated documents in three groups:

1. Ethnographic information compiled by G. A. Robinson in the 1840s and by anthropologists during the late 19th Century.
2. Records of casual encounters with Aboriginals during the 19th Century produced by travellers, missionaries, explorers, government surveyors and landowners; and
3. Formal government records from the 19th Century such as censuses and blanket issue distribution lists and from the 20th Century such as APB and Education Department records.

In doing so Boot (2004) identified 10 key themes:

1. Early contact – This theme relates to records of initial contacts between Europeans and Aboriginals within the KNP region, generally between the 1820s to the 1840s. It includes general observations of Aboriginal life shortly after first contact was made (where this is not captured by another theme).
2. Country & people – This theme includes records that broadly describe the country occupied by different Aboriginal groups.
3. Mobs – This theme incorporates details of individual Aboriginal people and their various affiliations to country and to places.
4. Language – This theme incorporates all documents that provide information on Aboriginal languages spoken in the northern and western regions of KNP, including those that provide English translations of Aboriginal words.
5. Ceremony – Records that describe ceremonies or aspects of ceremonial and religious life are included in this theme.
6. Place names – All records that provide place names derived from Aboriginal languages and meanings of Aboriginal place names are included in this theme.
7. Reserves & stations – This theme incorporates all documents that were found relating to

the Brungle Aboriginal Station and the Delegate Aboriginal Reserve.

8. Health – Documents covered by this theme are related mainly to the health of Aboriginal people in the northern and western regions of KNP.

9. Education – This theme relates to documents that provide information on Aboriginal education within the northern and western regions of KNP. Most of the documents are concerned with schools at Brungle.

10. Legal system – This theme explores Aboriginal interaction with the legal system. Documents within this theme all date to the 19th Century.

Boot (2004) found that the earliest record of Aboriginal and non-Aboriginal contact in the northern and western KNP region was in 1824, described by Hovell – including smoke of Aboriginal camp fires, burnt areas of landscape, and trees scarred by stone and steel hatchets (Boot 2004: 8). The presence of steel indicates there was contact in the region prior to 1824.

The records Boot reviewed from the 1840s describe the consumption of bogong moths at ceremonies attended by Wiradjuri, Wolgalu, Ngarigo and other groups. These ceremonies occurred near Mount Kosciuszko, in the Bogong Mountains and elsewhere at high altitude locations within the Snowy Mountains and appear to have been held in the spring and autumn (Boot 2004: 8).

For Boot the most important post-1850 record found during his research is that of A.W. Howitt's ascent of Mount Kosciuszko accompanied by the Chief Justice of Victoria in January 1866, as described above. That record indicates that a route up the mountain had been communicated to Howitt by the manager of Tom Groggin Station on the Murray River who in turn had been taken there by an Aboriginal man. When Howitt followed the route, he found it had been marked in the past by tree scars and that a more recent, fresh scar had been made just prior to Howitt's journey. The trail was evident on the ground as a foot pad and marked by scarred trees at the summit of the ridge and followed a spur adjacent to Leatherjacket Creek for much of the ascent from the Murray River (Boot 2004: 9).

The archival records examined by Boot suggest that three groups occupied parts of KNP: the Wiradjuri, Wolgalu and Ngarigo. While the Wiradjuri would appear to be the largest of the three groups, they appear to have occupied the smallest area of KNP, principally the western edge of the park between Tumut and the Murray River (Boot 2004: 9).

The documents relating to Aboriginal cultural beliefs in the Snowy Mountains suggest that the Wiradjuri and the Walgalu belief systems centred on a single Supreme Spiritual Being or All Father culture hero and that they had two major moiety divisions associated with Eagle-hawk and Crow (Boot 2004: 12).

Boot also collated Aboriginal place names within KNP which he categorised as follows²⁰:

- names associated with resources available at the place, such as Giandara/Kiandra (place of sharp stones for knives) and Cobaragundra (camp above flood mark where eggs are available)
- names of places where particular activities were conducted, such as Carangal (initiation ground), Yarrangobilly (creek where tooth was removed) and Nangar/Nungar (place to sleep)
- place names that indicate whose country it was, such as Coolamine (angry men) and Pulletop/Pullelop (place of Puller an Mitter), and
- names of sacred places, such as Mullanjandry (home of the eagle-hawk), WerebolderaBogong (no sit-down mountain), Cobbera/Cobborra (head) and Orungal (tomorrow/sunrise).

Boot found there to be one Aboriginal Reserve and one Aboriginal Station established close to the current park boundary; Brungle Aboriginal Station on the western edge of the park and the Delegate Aboriginal Reserve to the southeast. Delegate Reserve was established in 1892 and revoked in 1957. The reserve was leased to non-Aboriginal people indefinitely from 1927. The former reserve is now leased crown land. Brungle Aboriginal Station, was established between 1889 and 1900. Parts of the Aboriginal Station were leased to individual Aboriginal people in the 1920s and a large proportion of it was revoked in 1955. The remnants of the Brungle Aboriginal Station are now run as a self-determining Aboriginal community (Boot 2004: 17).

The KNPAS also involved research by Mike Young and Ellen Mundy. Their work was published as 'The Aboriginal people of the Monaro: a documentary history' (Young & Mundy 2000; and later Young 2005). This extensive documented history contains short oral histories of 'some Monaro families', and some of these stories describe people's historical association with wild horses and cultural affiliations with the Snowy Mountains.

A Ngarigo woman was born on the Snowy River in the early 1930s, and described how her grandfather worked on sheep stations and farms around Jindabyne and Little Paupong. They travelled around with a horse and cart (Young 2005: 409). A Ngarigo man's grandfather's brother 'had a special gift – he was well known for his ability to break in the wild brumbies up in the Snowy Mountains' (Young 2005: 415). A Ngarigo woman described how her great uncle worked at Corrowong and broke in the brumbies; 'they had a lot to do with the brumbies' (Young 2005: 420). A Ngarigo man explained the spiritual connection Aboriginal people have with the high country; 'Ancient storylines from different parts of Australia intersect here, so it's important to many Aboriginal groups. The storylines came with the ancestral beings. The rivers have their stories too, and sections of the river from its source to its mouth are the responsibility of family groups in their country' (Young 2005: 53–54).

²⁰ Other place names outside the park were also identified by Boot.

3.3 Kosciuszko National Park Plan of Management

The Kosciuszko National Park Aboriginal Working Group was formed as part of the Kosciuszko National Park Aboriginal Heritage Study, which enabled Aboriginal people's input into the development of the Kosciuszko National Park Plan of Management.

Kosciuszko National Park Aboriginal Working Group consisted of Aboriginal elders from Monaro Ngarigo, Wiradjuri, Wolgalu and Ngunnawal countries. There was also representation from the Ngyimpa group for Mungabareena Aboriginal Corporation, Albury, to the west.

The Plan of Management was adopted by the Minister for the Environment in 2006 and amended in accordance with the NSW *National Parks and Wildlife Act 1974* on 26 May 2010 (geotechnical and water), 10 December 2010 (increase volunteer ski patrol beds), 10 February 2014 (horse riding in wilderness trial) and 14 December 2014 (cycling).

Because the development of the Kosciuszko National Park Plan of Management was well resourced and entailed broad and inclusive consultation with the Aboriginal community, it has become a document that encapsulates the contemporary Aboriginal view of an ancient landscape. For instance the use of the bogong moth graphic to represent an important seasonal food source; a statement of the Kosciuszko National Park Aboriginal Working Group; a statement of significance describing Aboriginal people's connection to the landscape; and a range of aims and objectives associated with Aboriginal cultural heritage management and Aboriginal participation in park management.

Relevant experts from the plan include (OEH 2014: frontispiece):

The Bogong moths are a significant feature of the high country, migrating every summer to congregate in their millions amongst the boulders. This annual migration attracted Aboriginal people to the mountains from near and distant places, where they roasted and feasted on the rich, nutty-flavoured moths. These gatherings were also important for conducting ceremonies, and maintaining political, trade and social links between different language groups. The moths remain an important seasonal food source for many animal species, including the diminutive mountain pygmy-possum.

The statement of the Kosciuszko National Park Aboriginal Working Group: Yerribie [= moving in Ngarigo]/Dhirrayn [= mountain in Wiradjuri]

Our Mother binds us to our laws/lores. This country is our Mother. We – the Aboriginal People of the Mountains – belong to this country. She is our beginning, giving us our identity and culture. She brings us together, and takes us away.

The Mountains are very old and an ongoing life force that strengthens the ancestral link of our people. We have a living, spiritual connection with the mountains. We retain family stories and memories of the mountains, which makes them spiritually and culturally significant to us. Our traditional knowledge and cultural practices still exist and need to be maintained.

We recognise the diversity of Aboriginal clans and People of the Mountains - Wiradjuri, Wolgalu, Ngunnawal, Monaro Ngarigo. We recognise that Wiradjuri, Wolgalu and Ngunnawal are known by their totem, and acknowledge the matrilineal (mother's) bloodline of the Monaro Ngarigo people. We also acknowledge that many other clans have associations with the mountains. The mountains recognise the language names given by our people and naming of places strengthens our living culture.

Our people travelled from many directions over long distances to gather peacefully on the mountains for trade, ceremony, marriages, social events and to settle differences.

The cycle of life and many seasons influence the movement of our people through the mountains to the sea and the desert. The stars, clouds, sun and the moon guided people to and from places of importance. These travel routes continue to be used and spoken about today.

Living by natural cycles, the land provides our people with life, ceremony, family lore/law, and resources, such as tools, plant medicine, plant food, waters, fish, animals and insects e.g., the Bogong moth, while the melting of the snow gives life to the many creeks and rivers that flow out of the mountains. There are places of spiritual and physical significance to our people, and we are committed to working in partnership with others to protect, maintain and manage these places.

Forced separation from our land had a profound impact on our family life. European governance disrupted and destroyed our traditional ways. We were moved away from our country, and many people were herded onto missions. Aboriginal family lives were torn apart with the removal of children, and people were threatened with death in some instances if they tried to practice their traditional ways, especially lore, language and culture.

Let us not forget the past while we look forward to the future. Past and present practices make us strong and we are committed to making this a better country for all.

It is our vision for the future to cooperatively and collaboratively work with the National Parks and Wildlife Service to manage the park and maintain its spiritual, natural and cultural values. This will build a strong cultural and economic base for future generations of our people. The development and provision of employment, training and economic opportunities

will deliver benefits to our people and communities. Our culture will be strengthened by access to our traditional lands and the development and participation of our people in cultural camps and cultural maintenance programs. By passing on knowledge to future generations of Aboriginal children, our culture will stay alive and strong.

The Aboriginal statement of significance (OEH 2014: 84–85):

The Snowy Mountains are of high cultural significance to the descendants of the Aboriginal tribal groups that occupied and visited them. In particular:

- *The spiritual attachments, surviving traditional knowledge, and family stories and memories illustrate the ongoing cultural connection that Aboriginal people have with the mountains;*
- *The country – its resources, cultural places and pathways – are of special social and historic significance to Aboriginal people, with some remembered in oral tradition, some documented in nineteenth century records, and others revealed by archaeological investigation;*
- *Aboriginal words and place names provide markers of the presence of Aboriginal people across many of the landscapes of the park;*
- *Aboriginal places within the park have social and historical significance to Aboriginal people. They provide a link to a past way of life, a cultural tradition, a spiritual connection and a sense of social identity that is highly valued by many members of the Aboriginal community;*
- *The significance of these places to Aboriginal people encompasses both material and non-material aspects; and*
- *The potential educational use of such places is a recognised component of their significance.*

The annual Bogong moth gathering was one of the most important Aboriginal cultural and social events in south eastern Australia. The ethnographic evidence, continuing Aboriginal knowledge about this event and the places, routes and physical remains of the activities associated with it, are of historic, social and scientific value at a state and possibly a national level.

The surviving archaeological resource of the Australian Alps is historically and scientifically significant as it:

- *provides evidence of a long history of Aboriginal occupation in the high country*
- *demonstrates successful adaptations to environments unique on the Australian mainland, and*
- *offers opportunities to reveal important new information about the length and nature of Aboriginal occupation and use of the mountains.*

Places associated with the European contact period and post-contact Aboriginal life and history, including those from the pastoral and mining eras, are of historic and social

significance to local Aboriginal people. Beyond their significance to Aboriginal people, the broader community values the collection of Aboriginal places found within the park.

Excerpt from people and landscapes chapter (OEH 2014: 83):

Entire landscapes also hold significant cultural values. From an Aboriginal perspective land and people are inseparable. The mountains provided Aboriginal people with food, shelter, clothing, tools, utensils and medicine. Beyond this the messages underlying the stories of ancestral beings, who shaped the plant and animal communities and the landscapes themselves, governed all aspects of traditional Aboriginal society. These story lines link people and features of the mountains with those of other distant places to this day...Cultural heritage resides as much in intangible values, as it does in physical form. Just as people shape landscapes, landscapes also shape people. Places within the park have been the scenes of innumerable human experiences. Some of these have survived as legends or anecdotes, others are remembered within place names, songs, literature, art, traditional knowledge, customs, symbolism or spiritual observance. More still reside in the memories of communities, families and individuals. For many people, these human experiences, be they first hand or retold, real or imagined, are what give meaning to a place. All of them help shape community and personal perceptions, attitudes, values and identities.

3.4 Other Aboriginal oral histories and views

As detailed above, Kate Waters undertook the oral history component of the KNP/PAHS which was completed in 2004. A number of other Aboriginal oral history projects have occurred that are very relevant to this study, including Australian Alps Oral History Project (Wesson 1994), Aboriginal women's heritage: Brungle and Tumut (Department of Environment and Conservation (DEC) 2007) and Stories of the Ngunnawal (JoH 2007).

The Australian Alps Oral History Project (Wesson 1994) involved interviewing 10 Aboriginal people with associations with the Alpine region. The informants identified travelling routes that followed food and seasons along Snowy River up to the Alpine region; massacre sites at Wapengo, Candelo and Delegate; and Delegate Hill as being sacred (Wesson 1994: 57).

'Aboriginal women's heritage: Brungle and Tumut' (DEC 2007) describes Aboriginal women's experiences across the Tumut–Brungle region and use of the cultural landscape. Community members owned horses at Brungle and used them for transport (2007: 28). 'Stories of the Ngunnawal' (JoH 2007) describes families living, camping and fishing on the Murrumbidgee River (2007: 28–30).

Aboriginal people's views on wild horse management also appear in the media. For instance, a Wiradjuri man expressed that the 'feral horses' degrade his country and produce long term cultural impacts (SMH/GW 11 07 2020: 13) and that they are 'destroying sensitive and important alpine ecosystems at the origin of our rivers' (SMH 10 03 2019). In 2019 Aboriginal people from multiple interconnected tribal groups 'held a ceremony to sing healing back into the land' (SMH/GW 11 07 2020: 13). The group performed a 'Narjong – a water ceremony – to invoke the sacred duty of caring for the river systems, a tribal responsibility for thousands of years' (SMH 10 03 2019).

3.5 Aboriginal Places

Two Aboriginal Places have been declared in the broader landscape surrounding KNP under section 84 of the *National Parks and Wildlife Act 1974*: Curiosity Rocks in Lake Jindabyne and Coolamatong (Lambie Gorge). Neither is in KNP.

On 7 April 2016, the Minister for the Environment declared Curiosity rocks an Aboriginal Place under section 84 of the *National Parks and Wildlife Act 1974*. The place was described in the NSW Government Gazette (No. 44) as follows:

Curiosity Rocks is significant to Aboriginal culture because it is in sight of Kalkite Mountain and adjacent to a camping area and ceremonial grounds situated along the traditional travel pathways up the Snowy River to the Mt Twynam area.

The place is rich in stone artefacts providing widespread evidence of long occupation and use of the area by Ngarigo ancestors. The area holds a deep spiritual connection for these ancestors to the Ngarigo lands and waters, the knowledge of which continues to be passed down across generations through the stories of the elders to the community of today. The Ngarigo people continue to acknowledge the cultural integrity of this place and the importance of protecting its cultural values for future generations.

The use of Lake Jindabyne within which the Aboriginal Place is located for water storage by Snowy Hydro Limited and any lawful activities associated with such use, including activities which cause the rise and fall of water within the Aboriginal Place, do not constitute harm or desecration of the Aboriginal Place.²¹

According to Heritage NSW, Curiosity Rocks is located on Ngarigo Country outside the township of Jindabyne on the Wollondibby Creek. Curiosity Rocks is on a descending ridge (now a peninsular) made of granite tors lying to the north-west edge of Jindabyne. The Ngarigo people inhabited lands to the east of the mountains on the Monaro Plains. Another place of significance related to the Wollondibby Creek, is Kalkite, which was another gathering and camping area for Aboriginal groups

²¹ NSW Government Gazette [No. 44]

travelling up the Snowy River to Mount Twynam (2016). According to Heritage NSW, there are Aboriginal objects recorded on the AHIMS database which are within the vicinity of the proposed Curiosity Rocks Aboriginal Place area, including the Curiosity Rocks site which is a female restricted site (2016).

According to Heritage NSW, Coolamatong (Lambie Gorge) is a Dreaming place for the Ngarigo Aboriginal people, and was a traditional campsite. Coolamatong is the name given to a Dreaming story about the snake, frog and turtle, which is associated with the local rainmaker spirit ancestor named Dyillagamberra. The place is important because of its spiritual link to this Dreaming story, and is named after it. The specific details of the sacred Dreaming story are secret and known only by a privileged few. However, it is widely known that Aboriginal people value Coolamatong Aboriginal Place as the site of the 'birthing' of a Dreaming story.

Coolamatong was a traditional campsite for Ngarigo Aboriginal people well before the arrival of Europeans in the area. The site's spiritual nature made it an important meeting and ceremonial place. Aboriginal people gathered here for ceremonies, to tell stories, and to teach younger generations about the Dreaming stories and spiritual value of the place. Evidence of the old campsite can be found in the many artefacts on the site.

Today Coolamatong Aboriginal Place is visited by local Aboriginal people to maintain their connection to the area, and to pass on knowledge of its significance to younger generations. Coolamatong is used as a place to share knowledge: a place where children are taught about Aboriginal culture and Coolamatong's cultural significance (2009).

4.0 Input from the Aboriginal community 2020

Six senior Aboriginal people were interviewed for this assessment; four were female and two were male. Four participants identify as Ngarigo, one participant identifies as Wiradjuri–Walgalu, and one as Walgalu. Three interviews were face-to-face and three were via the telephone. Interviews with two additional men associated with the Walgalu–Wiradjuri and Ngunnawal groups did not eventuate in the required time frame; these additional interviews would have created gender and cultural equity amongst the participant group. The authors acknowledge that increased Aboriginal participation would have improved research outcomes²².

Each participant holds cultural and historical connections to KNP and the surrounding landscape. Whilst the depth of personal experience with KNP varied between participants, all participants have used the park for cultural purposes throughout their life, and have had some involvement in the management of the park, either as NPWS employees, as members of various Aboriginal Advisory groups, or as archaeological survey sites officers.

The relevant LALCs had input into development of the draft wild horse management planning process by submitting letters to the Kosciuszko Wild Horse CAP. The shared view expressed in the submissions made by the land councils is that ancient Aboriginal cultural heritage has been damaged and is being damaged by an over-population of ‘feral horses’, and that the damage must stop immediately.²³ Fear was expressed in the submissions that Aboriginal cultural heritage was going to be lost forever and that the present-day Aboriginal custodians would be unable to pass important cultural knowledge and practises on to their descendants, in accordance with customary law²⁴.

4.1 The current awareness of wild horse management

Q Do you know anything about how wild horses are being managed in KNP?

I understand that they are breeding quite well. That some of them need to be culled or removed or rehomed. And some probably would be fine because people like to go horse riding but in places where they’re not going to do damage. INFORMANT #1

To my knowledge the wild horse numbers have grown to around 17,000, that’s too many. They’ve tried a lot of different things about how to keep those numbers down. I don’t think you’d ever get rid of them all. So, we have to sort of learn how to manage the impacts. And I think the impacts are

²² Additional and ongoing engagement with Aboriginal people has been recommended [see section 6].

²³ NSW Wild Horse CAP update July 2020.

²⁴ The LALCs will also be given the opportunity to comment on the new draft plan during the comment period.

really big at the head waters of the Murrumbidgee. One way to reduce the numbers would be to cull the older males and then reduce the numbers in all the different horse packs. INFORMANT #6

I've done work up there and we've observed the horses in the trees, peeking around trees at us, and also coming across Kiandra in the night I've observed lots and lots of wild horses on the sides of the road. And they seemed to be with the rabbits they seemed to be out of control. INFORMANT #5

Many years ago, we saw a plan about aerial herding and culling of the horses and being shot from the air. And what I know now is that they do passive trapping of horses. And that includes tracking, rehoming, sending them to the knackery, and removal. So, it had a four-part plan. And that's the only plan that I remember that they talked to us about. And I'm not sure if that plan has actually changed. Horses are barely mentioned in that Kosciusko Plan. INFORMANT #2

I think part of the problem that you have now that you didn't have back then was the population of horses. And if stockmen had horses, they had their own horses. But I think there was a difference because horses were used for a purpose and they were part of that era in terms of transport. And that wasn't always a national park. Some of the accounts that I've read of the history is that the country was such harsh country and when the agriculturalists and the pastoralists, whatever you call them, a lot of them failed down there the first settlers. And there wasn't feed in harsh weather conditions and when they left the stock was just allowed to wander. INFORMANT #3

I've been up in a lot of those places with National Parks and Transgrid in steep places and I've seen the brumbies there. I don't know a real lot about how they're being managed at the moment but I was of the opinion that the National Parks were trying to manage it given that the Kosciusko National Park is just that and that there was some sort of management going on within the National Parks and Wildlife Service. INFORMANT #5

I don't even know whether it was a sentence or a statement as introduced animals but barely mentioned (in the KNP Plan of Management). At the time they wanted to get the plan out and if they had put it in there as a strategy or a management issue it would have held up the plan like it keeps doing now in the management of the horses. So, they know that the horses cause an impact on the environment and so they're controlling it and management of it, if they had put that in that plan it's sort of like. I think in itself would have held the plan up. INFORMANT #2

Every time we've gone on field trips down here into Cascades and Tin Mines there have been horse populations down there. I think while they're really focusing on the wild horses, it's just part of a bigger problem. The wild horses they've become I think they have had a polarising sort of impact. INFORMANT #3

In the last 10 years horse numbers have tripled. A wild horse management plan needs to be implemented to address the cultural and conservation impacts. INFORMANT #6

I don't know when the first actual wild horse appeared, but I can't imagine in the late 1800s there would be many because, like I said, they were valuable things, the horse. But later on, when they were catching brumbies to use and trying to keep as a saddle horse, they only wanted good ones and brumbies get into herds and they get inbred... Big long ears and misshapen – they're inbred. I know for sure they used to go and shoot stallions and then now and then let a good horse, one of their own blood horses or warmblood stallion loose, to improve the stock of the wild horses... Then they'd catch them. Ones that might be worthwhile keeping as a saddle horse or a stockhorse, they'd keep and anything else got sold as pet food or to some unsuspecting pony club rider. I can remember up until the early 1970s, there was a stock sale, I think it was every year in Jindabyne, selling horses. 99% of them went to whatever the company was that makes Pal meat for dogs. They ended up as pet food and that was the 1970s. I admit there are some brumbies that were caught and broken in and ended up good horses, but that was I think because they were breeding them to be like good horses, like I just said, in my experience of brumbies. That was the early management. When I started working with National Parks in 1978, a person could still apply for and get a brumby running permit to go and capture wild horses. They were in small numbers, small enough that at that stage there were more pressing problems, like the pigs. There weren't deer then; that's worth noting. There were no wild deer in any of the places now where there's big populations of wild deer. There were none. There are some places where there were no wild pigs back then, where there's now wild pigs. There were just relatively small numbers of brumbies. It's Long Plain, Tantangara. Botheram Plain, which is just above Lake Jindabyne, had a little herd of horses. The Pilot area and Byadbo area. Relatively small. When I say small, I can remember standing at Tin Mines and riding down there, I think we counted 30 horses or something in a day; not all in one mob. They were right through Byadbo and maybe I think the biggest, you'd probably see 10, 15. They're a different mob than the ones on the river. Last week, I think we saw about 10 in one mob, just on the Snowy River. I went on a canoe trip all the way through there about four years ago and I've told people, there was not once where you couldn't look up and see a pig, a horse or a goat. We didn't count them, obviously; that wasn't the purpose of it. But compared to when I lived and worked there and spent a lot of time on that river, you'd fly up there in a helicopter and you'd maybe see 10. That was a big day. We went down and over four days, it was just non-stop, a wall of horses. They were everywhere. The '70s and '80s, and we never saw them and I never went there, but I'm sure there would've been horses up here on Tooma/Jagumba area. That's a bit bushy; that's not horse country, as far as I'm aware. Back of Blowering, Bogong Peaks. But Tantangara and Long Plain, yes, there were horses there, for sure. INFORMANT #4

Horse country' is a bit more open. Up here in the high country, the snow grass plains and things like that, and down here. There's a place in there called Edbo which is on grassy, water, all that, whereas a little less likely in the really heavily forested areas to find horses...I've seen them in the snow. That's below the snow line, down there. That's my area. Botheram Plain, I've seen them in the snow, but that's not deep, deep snow. It's not like right up on the main range. INFORMANT #4

4.2 The value of wild horses to Aboriginal people

Q: Are wild horses important to you and your family?

Well they became a story within my family because obviously my ancestors, my old people, they liked being around animals. They always were around animals. And the stories that come from our old people about members of our family being good horsemen and working stock and stuff like that. And they were always around horses and stock. But that's after contact with Europeans obviously. But prior to that you can see the makeup of our people and it's about animals. You had your animals and your totems and stuff like that. They were very important. They were all good horsemen. They were on the Monaro, Delegate, Bombala and Wallaga Lake on the South Coast. We've actually got a picture somewhere of Uncle with his horse. INFORMANT #5

The horses that our great grandfathers used I keep going back to the point that they had a purpose in the park at the time in history, in people's connection to their settlement. There were farms and things, so they were part of that landscape. But they have since become that romanticised view of horses by people and I don't hold that romanticised view of horses. Culturally they don't mean anything. The native animals for cultural connection up there, when people went up there, they lived on the plants, the animals that existed. Horses weren't one of them. Pigs and deer weren't one of them. Like I said the Canadian Indians, horses were a big part of their cultural connection on country. Not for us. They weren't there. They weren't part of the landscape. All I know is like great grandfather and that they had a horse and cart. So, it was general moving. It wasn't like they had them as pets or anything. They weren't part of the family, or the cultural stuff, other than for transport. Basically, they're untamed and that they're not domesticated. They're not used for any real purpose. And that they're connected to that romanticised place in Australian history that horses seem to have. Particularly up in the high country. INFORMANT #2

When I was a child and lived at Brungle every family had a horse. That was the only mode of transport that we had, other than walking. So, each family had their own horse because some of the men worked for Kiley's Run or Red Hill Station as stockmen and they rode the horses. So, there's a place for horses in our heritage but where that is I don't believe is Kosciusko National Park. I don't like wild horses in Kosciusko National Park full stop. I think they look like they're wild and free. And that's not a bad thing. But it's the damage that concerns me. We call them brumbies. We don't mind if they're not on sensitive areas. But then we don't know how many of our sites have been trampled or special areas that have been trampled because we don't get to go in there. INFORMANT #1

Look not particularly. But they're again part of our history. They're part of our story. Only for that reason. I don't have an attachment. They're not important to me. I don't have a value as such now. I value the memory. And the history that was part of our family's story. But I have no sort of, I don't have an affection in memory that relates to horses. INFORMANT #3

Our family were involved in the horse industry. They would go into the mountains and muster the wild horses and take them to Corrowong Station where they lived. They would break the horses in on the station, before driving them down from the Manero, from the foot of the high country to the steamers at Tathra. They rested at Cohens Lake (now called Blackfellows Lake) near Tathra before going to the ships. I don't know where they were taking them. Whether they were taking them to a glue factory somewhere or meat factory or whether they were taking them for the Boar War I don't know. But Mum always said that they used to run the horses down to be put on the steamers and they used them I suppose for the Light Horsemen. They could have been working for someone else I don't know. INFORMANT #5

Even though historically after colonisation a lot of our ancestors went up into the mountain mustering cattle, so there is an historical connection there. And for some Aboriginal families that's really important because it shows what they did after the country was colonised and the employment that was around. That's a rich knowledge for a lot of those families. And so, they're pretty proud of that. We had people from our community go up and muster a lot of cattle on horseback. And there was a lot of pride. They had a lot of pride in going up and doing that type of work. But they were mustering up there or mustering cattle...they were riding but that was the only form of transport. In that high country. And you had to take employment where you got employment really. There wasn't a lot of employment around for Aboriginal people in those days. Employment was employment in those days, and there weren't a lot of opportunities for Aboriginal people to work on their traditional country. People were dispersed and relocated to Aboriginal reserves. So, getting a job on country was a good way to be on country and check traditional country. They had knowledge about the country and used our traditional pathways. If they came from the country then they'd have knowledge of which way to muster is the easiest, which way was the easiest way to get in and out. Because we knew the quickest routes through that mountain for thousands of years. And they most probably relied on the Aboriginal people doing the mustering to take them down the fastest route. INFORMANT #6

I don't know how long they've been up there now; they could have been there for what two hundred years. But they seem to be an iconic part of the Snowys now. Canberra's got their rugby union side called Brumbies. There's a Brumbies Bakery there. So, it's iconic to the area so. It makes me sad though to think that they probably are impacting our Aboriginal sites. They could be thousands of years old. I think some of the sites they were finding are there, I can't exactly say what era they were, but they were old, three to eight thousand years I think so. INFORMANT #5

There's no real cultural connection to the horses, only through their living on the country and using horses for transport and tracking. They knew their country and the horses and because of the nature of the landscape they used horses to get around. Great grandfather left the Bombala Mission, he didn't want to stay on the mission, and he headed down the Snowy to Bemm River and headed to Orbost. Great grandfather was a native police tracker. INFORMANT #2

It was a cheap way of transport for my grandmother. My grandmother used to drive her sulky, horse and sulky from Yass through Wee Jasper to Brungle. So, she had some little camping spots along the

way. With all her children. My great grandfather used to ride into the mountains. He was a tracker and he used to ride into the mountains with the police looking for people. My father was a stockman at Red Hill Station. It's Adjungbilly. We had a family horse called Creamy and my grandfather had a horse called Nugget. INFORMANT #1

It's an iconic connection with non-indigenous people. And it was a necessity for Aboriginal people. Because our access, traditionally we used to walk everywhere but when colonisation happened access was denied, so that happened so you needed a mode of transport. And that's the horse and buggy. INFORMANT #6

It's not like it was hundreds and hundreds of years ago. So, horses, the actual wild ones, you wouldn't come up with stories about domestic ones that the white fellas were riding around on, would you? I wouldn't. But the actual wild ones probably didn't happen until – I'd love to find out – 1900, something like that, I guess. I don't think anyone had time to come up with stories of horses. They weren't there long enough. INFORMANT #4

There are images of horses being led in that are packed. But that's them trackers leading them non-Aboriginal people into that, like I said harsh country. I think historically, and we know that the horses traditionally aren't part of our culture, but historically they form part of a story. The story is a more recent history of movement across this country. I think horses were really valued very differently in that day if you look at the time that they were operating in. But it's in letting the population go wild that's become the problem. INFORMANT #3

My father was a stockman with the Lands Department in the 1940s when the snow leases were still going. He used to be up in the mountains, and so was his father, he was a stockman, and my great grandfather was a stockman up there...Their main objective was to get sheep and cattle up in the high country and graze them, and anything that interfered with the grazing was considered to be vermin, which meant kangaroos. Anything that was eating the grass that the sheep and the cattle were going. I don't know when the first wild horses appeared because back in the 1900s, the horse was a valuable thing. If there was a wild horse and it was worth having, you'd catch it. A bit like someone dumping a car out the front of your house. You'd catch it and use it, and if you couldn't, you'd shoot it because it was eating grass of your sheep and cattle and your own horses. To be blunt, they're of no commercial use to me and I've no connection with them at all, culturally, except for my ancestors, white and Aboriginal, would've valued them in the 1800s. INFORMANT #4

Q: Those horses that your ancestors would have been using for mustering and getting through that country would they have been wild horses or domesticated horses or would they have owned those horses?

I think they would have been a combination of both because they would have been breaking in horses. They used to go brumby running. And then you could bring the foals out...they used to go up and get the little foals and then bring them home and they'd be easier to break in and then they'd

domesticate those animals and use them in their everyday life. Well, we had a horse and cart. Well before cars we had to get around with drays. So, in the modern world, like after colonisation, that was the mode of transport. INFORMANT #6

Q: How does it make you feel when you see the wild horses in that alpine landscape?

I feel good because they're there and they're on my country. And they've evolved. Our people did have a name for them. Yeah, but whether I want to give you that name. If I do it's a name that's part of our intellectual cultural property rights as all our language is. It's possibly a word, they used for a different animal I don't know. But that was the word given to me by my grandfather, my uncle and my Mum. I just call him a brumby. INFORMANT #5

When I see them, I feel sorry for the actual animal a lot of the time; I really do. Especially if you see a poor dead one lying next to the river, which I have done quite a few times, you think poor old horse. INFORMANT #4

I've never had that sentimental attraction to the horses. Because unlike other indigenous people like Canadians who have always believed the horses were there before the settlers come. They came with the settlers and they bred and bred themselves into that park. They aren't part of the landscape like other indigenous people see horses. INFORMANT #2

I just hope that they don't run across the road and I run into them. It's a safety thing. INFORMANT #1

When I see the horses it's almost like I see their survival. Not just their survival but they've prospered in that environment. But then if you see, you then start looking, you look beyond the horses and you start looking at country and you look at those bogs. And you look at those tiny little water sources where those really precious and rare animals, little frogs. And that's really quite shocking. That's really quite confronting is perhaps a better word for that. And that makes me sad because it's so unique. INFORMANT #3

I'm not a fan of wild horses because I am aware of the damage that they do. I know it's a big tourist industry. I know it looks good when people take photos and everything. But all I see is the degradation of the indigenous landscape. And I would rather look at native animals than feral horses. INFORMANT #6

Q: Has your attitude to wild horses changed over the years?

In the past 20 years, as I've watched the numbers increase, yes, my attitude has changed. I didn't mind them. I didn't have any great love of them. My attitude has changed now. I don't think they're even remotely romantic or good or worth looking at or worth having, at all. Back then, if there was only like sort of 10 in there and they weren't doing the amount of damage which they were doing in

the last few years with the big drought, the drought really amplified the amount of damage they were doing, are doing. I did call them brumbies until 10 years ago and now I just call them feral horses. My attitude changed. I've got to admit, when I was younger, up until 20 years ago, I didn't pay a lot of attention to the damage the horses were doing, because in my opinion they weren't doing a huge amount. I know they were doing some, but compared to other things, no. Since then and since seeing it now, no, I don't call them brumbies anymore. I call them feral horses.
INFORMANT #4

If I was a stockman or owned a stock company and that was my business and my livelihood in 1860, and one of my stockmen lost his horse, I'd say go and catch it and bring it back; it's worth a lot of money. It's like, oh I lost the Landcruiser! Well, go and get it. I don't imagine there would be a lot of escaped horses that didn't get tracked down and found. Somewhere along the line, it was after horses became really valued, I think. They started getting cars and whatever, they said bugger it, if the horse has escaped, who cares? We've got a motorcar now. INFORMANT #4

Q: Do you see horses differently to other introduced animals?

No, I don't see them any different to the pigs and deer and whatever else runs around up there. Because of the damage they do to the waterways or erosion and vegetation. INFORMANT #2

I see them as introduced species. And I see them as too many. And I see them as just wild horses that need to be managed. And I have no relationship though, the only relationship I have with horses, and maybe up there, is that our great grandfather was a tracker to the police. It is only to me that historical connection. It would have been shared by Europeans because the police used horses. And a lot of our grandfathers and uncles were good horsemen. In many ways, my great grandfather on my father's side he was a rough rider in the Light Horse and he went to Beersheba...one of the things that we want, it doesn't exist up on that mountain, is the Aboriginal connection from the trackers. And there's a place called Seaman's Hut, that is at the top of the Snowy. And it was about four people going missing and they brought in the trackers. And her great grandfather and my great grandfather were the two Aboriginal trackers. And the story isn't written anywhere. All it's got in the hut is about the four white people that went missing. And they got letters from the family writing to our greats thanking them for their efforts. INFORMANT #2

Q: Can you explain the difference, if there is a difference, between Aboriginal people's connection to the wild horses compared with non-indigenous connections?

I understand that's what made Ngarigo men, well apart from being skilled horsemen, their knowledge of that country that they actually led those early settlers up into the high country.
INFORMANT #3

I'd say there would be less of a connection because for thousands of years they weren't a part of the Aboriginal community. Only in the last two hundred have they been a part of Aboriginal communities. So, there's whole centuries of not having them in the landscape and a little while or short time now. So, I don't believe that there's a strong connection. INFORMANT #1

No difference at all. None whatsoever, in my experience. There was no difference between the Aboriginal ancestors and the white fella ancestors. I think they treated horses, feral or domesticated, the same. The domesticated ones, they'd look after them because that's your livelihood. The wild ones, get rid of them, they're competing for feed and everything. INFORMANT #4

Prior to introduction our people wouldn't have known about the horses but obviously because we were affiliated with them and they always speak about the brumbies. So yeah, they're definitely a part of our social and part of our lives definitely...they're just on our country and they're just part of our story, our journey. I will say that we have found evidence in another spectrum that our people did adapt, our people on the Monaro did adapt to new things coming in. And one of them was the glass bottle. And we actually have found spear heads made out of glass on the Monaro so that tells me that our people were adapting. So, with the horse absolutely our people were adaptable. I could just see my elders my ancestors just how good they would have been with animal husbandry, as one with the animal you know what I mean. I can remember all my old people they didn't like being cruel to animals and they always treated animals with the greatest respect. So, it's got to be a shared history because the white fellas brought the horses in. But you know we like seeing them but also, we are mindful that they could be destroying the natural habitat for all the other animals that are unique to Australia and to that country. That although they weren't there now, they're there they're part of your story. I think we still need to make sure that they're not growing in so greater numbers that they're really starting to destroy the landscape. INFORMANT #5

I think the very public stouthing and whatever in relation to the wild horses is interesting because while there's no denying what the impact on the environment is, I think it's more around people's stories, stories of connection. And not just our stories, Aboriginal people stories of connection, but if you look at the people who are quite vocal in opposing, in saving the brumby and letting them run free and that whole romantic sort of attachment to the brumby, that's effectively people's stories. And their connection and story are part of your validation of your identity. That's some of the things I'm coming to learn. INFORMANT #3

4.3 The impacts of wild horses to Aboriginal cultural heritage

Q: Do wild horses cause any problems to your country?

Those sites that are listed on AHIMS alone are being impacted by heavy, what do they call them, hooved. I think that if there was a survey done in this section along the Jacob, along Jacob's River, I think you'll find them. I've seen them down here. I think it's called Scotts over here. You will find them. They're just not recorded. On one hand it may be valuable to go in and record what is on

there, do some survey work and actually record what's along that river. But the bigger problem is we're not, and I'll go back, I've said feral pigs as well as the wild horses, but these sites are also heavily impacted by the use that's down there. There's no denying that the diversity and the fragile nature of the ecology in Kosciusko National Park. And there's no denying the damage that's being done by horses. INFORMANT #3

There's Blue Waterholes. There's obviously men's areas and women's areas so where they're situated. There are also the rivers flowing from the mountains that are important as women's birthing places. And special places, particularly for men and particularly for women, and also for families. My main worry is the water. If it's affecting the water, it's affecting our country. I don't know a lot about vegetation but I know that there are some areas that shouldn't have hard hooved animals on them. INFORMANT #1

I guess they do. Like because they've got hooves. If they're running in very sensitive tender lands. Like there's a lot of wetland up there from the snow. There's a lot of plants there. The ecosystem up there is very, very sensitive. Because they only have certain windows from snow to spring and summer. And then they're covered by snow and whatnot. But yeah, definitely wild horses if there were scores of them, they could definitely do a lot of damage...you're talking about plants that could be medicine plants, healing plants, plants you eat. And then there's other things like the special little fellas like the Corroboree frog and things like that. Their habitat would be very sensitive in soggy areas. INFORMANT #5

We have the head waters of the Murray and the Murrumbidgee in our country. So, we have stories for all that country, cultural storylines. So, it's all important. It's interconnected. Damage to the headwaters of the Murrumbidgee could be catastrophic for the whole catchment going all the way down to South Australia. That water goes down off the Murrumbidgee and supplies all the water all the way down through the Murray Darling Basin. And that's where the big impact is happening with the horses. And then once you impact headwaters of the Murrumbidgee, you're cutting off the life blood for all the Murrumbidgee. And it flows all the way down and then meets up with the other rivers and then goes into South Australia. So, the horses are just not impacting Kosciusko National Park. They're impacting Murray Darling Basin communities. Any impact to the headwaters to the Murrumbidgee, then impacts communities downstream who depend on the Murrumbidgee. So, the impact's pretty substantial. INFORMANT #6

That's where I grew up, that's where I got taught about things, on both sides of my family, which is important. So, I can see the damage that has been done by feral horses to the physical and I suppose the spiritual heritage. Like the actual artefacts. INFORMANT #4

We just really strongly object to the mass number of the brumbies. And I said they're growing they're not declining. Because we look at the destruction in our cultural landscape. We look at it from a different point of view than most probably the mainstream people. Culturally it's not right that we have horses running all over the place destroying our cultural heritage. INFORMANT #6

Impact is then broader that we don't see and it's on the ecology of all those other critters and animals that rely on those rivers. And that river is home to all those other, the whole sort of, a bigger picture of all those animals. So, you've got that sort of immediate impact. You've got to look at that whole landscape and you've got to look at the whole ecology of it. You've got some really significant bogs. And you've got things like the Corrobboree Frog, really unique species that are unique to some of these very fragile environments. We didn't get the Bogon moth population that we've had. So, what's the implications of that for those pygmy possums. You know all those really fragile endangered species that are up there. And that's just so heartbreaking when you sort of, because you can be up here but when you zoom on down into the dirt, the vegetation and everything around it, the water. And the horses are, I've seen really powerful images where the horses are damaging waterholes and some of them bogs and creeks. Very obvious damage. INFORMANT #3

Water is so important because it connects all our communities and it's the blood of our land. We see it as the blood and our culture and our ancestral stories are laid out in the landscape. And that's our life blood. And nothing is sustainable without water; not only from a cultural perspective but from any perspective...where it's coming out it's only a trickle anyway at the head waters and if the horses are trampling back and forth that is stopping the water from flowing properly. INFORMANT #6

Across the creek way taking weeds on their hooves. Even when the horse riders come and they've got their floats on the back of their vehicles they're still bringing in weeds. The cultural value of our native species is being impacted. That affects how we do ceremony and movement across the landscape at certain times of the year because that depends on the native plants and the animals that are around and the cycle of that they are connected to those seasons, our cultural season. Well, there's the Murnong. It's becoming an endangered species because it's not getting an opportunity regenerate. In terms of our women's plants the orchids, the tubers and the medicinal plants, they've been demolished. And that's because, not only because of the wild horse population, but the recreational horse riders taking horses into the area, car tyres carrying in weeds and seeds and the droppings from the domesticated horses. So, the landscape is being impacted by different aspects of the horse problems in KNP, feral and recreational. The way they walk. And the way they dig up. And the impact they have on the ground. So, the hooved animal leaves a mark on the landscape. And so, in terms of where the water goes, how it runs, what they're bringing in. So, they carry a lot of weeds. INFORMANT #6

The vegetation, you've got your water, you've got your animals, you've got your cultural seasons. It's not just the four seasons that we have now. Like our cultural seasons and the indicators of when we move into certain spots. So, we wait for a certain flower and we'll wait for a certain plant. And when that's no longer around because it's been eradicated because of overpopulation of the horses. How do you pass that knowledge down? That knowledge has been around for a long time but if you can't show the younger generation what that plant is because it's no longer there how do they then teach their grandchildren about the cultural landscape. INFORMANT #6

We went to Peppercorn. Peppercorn is one of the places where the Murrumbidgee River starts. They're big sphagnum bogs and they're just decimated, gone, finished. You couldn't ride a horse through them when I was on the stock squad chasing cattle and sheep up through there. You wouldn't even think about it, you'd break their leg. That's the start of the Murrumbidgee River, and now it's like that, rock hard clay. Cooleman, Long Plain. These are the springs. It doesn't start there; it starts the other side of the road. The Tumut mob will tell you about this, Peppercorn. It's probably deceiving to say it's the one and only. There's a range, a small range of hills with bogs. All those come together and that's the start of the Murrumbidgee. All those bogs are sphagnum bogs and they're all wrecked, destroyed, by pigs, deer and horses. Makes me feel very, very sad. Really sad. The same here, Cowombat at the start of the Murray River is exactly the same story. I haven't been there personally. I've seen the photos and it's exactly the same. It upsets me, because water is important...I grew up being taught water is really important and you look after it. Fishing all my life, rivers are important. That just makes you think, well, if they are important, why not do something about it? These people who love the mountains so much. The smaller catchments have been trampled, the vegetation has been changed, like I said. That's going to affect the river. That's the whole domino thing. You affect one thing here; it affects the river. Now there's such a huge increase in numbers, there's a noticeable amount of horse manure and on waterways, and it's not supposed to be there.

INFORMANT #4

Do the horses have any impact on the spiritual values of the landscape?

Within KNP there are intangible cultural places linked to the landforms that are impacted by the brumbies. So, it doesn't matter if there isn't an artefact scatter or there isn't a burial or there isn't something there. It's all culturally significant because our ancestral beings lay in those landscapes. And that's how we identify with our culture. They do because our cultural landscape is sacred. They're trampling all over it and it holds the lore for our Walgalu people. So, the cultural values that lie in the actual land formations are being disrespected.

INFORMANT #6

The start of the Murrumbidgee River which is in the northern side of Kosciusko National Park. It's where the spring starts the Murrumbidgee River. And we had a water healing ceremony a couple of years ago and I was lucky enough to go where that spring actually starts and there are horse tracks there which means they're trampling the spring and probably going to cause a lot more damage.

INFORMANT #1

But those other feral animals, I link them all together, it's quite obvious if you know what any of those do, they eat vegetation and they trample or dig; the rabbits will dig burrows. They've got to have an impact on sites, including spiritual sites, stories. It's not the same if you're looking at a hill and telling someone about the story, if it's got great erosion because of horses and digging pigs.

INFORMANT #4

I believe the head water it's the birth place of that river. It sits, the head water bubbles up at the base, well not at the base of Kosciusko, but that peak of Kosciusko. And from a cultural perspective

we know that that river's always been important to women. Lubra Rocks has very similar formations to, down here, to Curiosity Rocks. It's one of those intangible cultural values. It's spiritual. INFORMANT #3

We get really disheartened and disappointed when we go up and see how trashed they make it. How they're destroying the landscape. And the impacts they're having and when we go look for a certain plant and the plant is no longer there. And we've been going there for hundreds of generations to the one place to do cultural business. When we take our people back onto country for the purpose of passing on knowledge and law there are gaps in the cultural values, because the vegetation and animals are no longer there. It's highly emotional to me personally, because that country makes us who we are. That country makes us who we are, when you have that country and those values. And something inside just dies when you go up to see something and it's no longer there. I don't know it disheartens you. It's like losing a bit of your family. INFORMANT #6

The damage they do to our animals, which are our relatives, and archaeological sites as well, which I've seen, and to the vegetation. I've seen it. Over thousands and thousands of years, when the snow falls, the snow up in the high country doesn't actually hit the ground. It hits the tussocks, and it can be metres deep, but underneath there's all these tunnels through the tussocks. That's where the broad-tooth rats, and all those animals that don't hibernate, live. The horses come in, eat all the tussocks, the snow hits the ground, all those animals that have evolved to live under the snow have it pretty damn tough..... Their winter house has gone. INFORMANT #4

It's just your connection with it. Last week and I showed my partner a site and there's emu shit all over this site. That was good that there was emu shit there. But if it was horse shit, that's a different thing. I would've said the same with deer, if it was deer or pigs being on the site. I class them all the same. They're all a detrimental effect on the actual site and people's connection with it. This is especially the more remote ones. I can understand, see there's a big main road, the Barry Way goes down there. There's always been, as long as I can remember, people camp there and chuck their rubbish out. There are artefacts, huge sites all through there. It pisses me off and it always has, people chucking their rubbish and leaving all their beer bottles and stuff. But when you see way up here, you can only get in there by canoe or by helicopter or walk or by horse, and you see a big camp site and there's horse shit all over it. There are other places where you stand, which is part of a story, and you look at something. There's a big waterfall up there and one of the main places where you camp with young people and tell them the story, now you camp in piles of horse and deer and goat shit. All of them. INFORMANT #4

Even it means when you're telling someone the story where you used to stand on a nice little thing, looking out over the river, now you're standing on a pile of horse manure, looking at branches that've been chewed by horses, thinking that used to be all Snowy River wattles and they've chewed them all down, because we've got our own wattle tree there...It's changed and it has changed it for the worse. There are old travel routes. The idea that there is a pathway from here to there doesn't exist. The lower Snowy River valley is a pathway, the whole valley, and that's recorded. Obviously, there are places where you're restricted to one way up a ridge, because of the geography; that's the

way you would've gone. If they're the spiritual sites quite often, peaks and up the top of the mountain or whatever, they're a little bit more protected from horses in a lot of cases. You don't get wild horses, feral horses through the Thredbo Valley, because it's all heavily forested and all that scrub. I've chased cattle through there and it's really hard riding through there, so horses don't go there. INFORMANT #4

All Monaro people, Monaro/Snowy Mountain people, you're either from birth an eagle or a crow person. An eagle can't marry a crow. I suppose you'd say eagles and crows are one of the most important ones. Then it goes down from that to everything. It ends up everything, if you keep going. I can't say any one is more important than another, and I don't know if eagles and crows are badly affected by feral horses. They could be; I don't know. The whole thing about all this, without getting all spiritual and mystical about it, everything is connected. I told you that snow grass is getting flattened because of the horses, if the broad-tooth rats aren't breeding up and they're dying off, then something that eats them- The other good one is the dingo, and if the dingo is affected by that and they can't keep down the numbers of wallabies, then the wallabies explode and inbreed and get crook, and the eagles that live on the dead wallabies are affected. That's going really all over the place, but you know what I'm trying to say. Everything is connected. If that bird up there dies, it could very well affect something from there on. I don't know, the horses would have to be affecting in some way or another, somewhere along the line, the plants and the animals and the other things, because not everything is plants and animals. I don't know about the stars! But it affects the stories that the stars are connected to. Yes, the horses have a big effect on everything, I would say. If you look at it the old way, a custodian has got to look after everything and understand that everything is connected, and obviously if you affect one thing, you affect everything in one way or another. INFORMANT #4

I noticed that trampling, horses gathered trampling. The soil edge of the creek was damaged where it was falling into the creek. And also, it was damaged from that constantly coming back to that same place. So, it was ongoing damage. Yeah, not just to the vegetation but to the waterway. Well obviously, that impacts on the pristine water that flows through the creeks up there...we have unique fish in those waterways and we have unique plants that live near the waterway that belong to that country. So that damaging of the waterways means that it's never going to recover. It's like just pristine water and its water that needs to be protected. And it does have a life of its own like all rivers and creeks and that. And it's an ecosystem within the park that needs to be protected. INFORMANT #2

I've thought of the spirit of the river going, I don't like this. I have thought about all these dams pumping all the water all over the place and all of it is supposed to go down our rivers and it's going over this river. I've thought 'I wonder what the water spirit thinks about this'. It's the same with the horses, I suppose. But I don't ever think my great great grandfather's spirit is there thinking what the hell is this thing?...and I haven't spoken about the corroboree frogs. They're destroying their habitat and a whole heap of other things. Yet no-one cares or mentions anything. That's their heritage of the Snowy River. INFORMANT #4

Yeah, it would because that's our mother, that's our mother earth. And like if there's medicine plants sensitive in those areas they could be impacted heavily or other food plants and whatnot. But yeah, like I said the brumbies are there. Whether people want to get rid of them altogether or try to maintain numbers to levels, but if you just let it get out of control, I'm pretty sure they would impact heavily on us. INFORMANT #5

The moths have got more bloody value and heritage than the stinking horses that have been there a hundred years. Moths have been going up there, and it's really, really interesting, for thousands and thousands of years, which are an important part of Aboriginal heritage. No-one seems to care. Same with the frogs and everything else. INFORMANT #4

You get moths here and then all through there. These are Wiradjuri mob. They could very well have come out from Wagga or Griffith or places like that, because these are all ceremonial, not actually the moths, the big ceremonial, huge stone rings up here. They come camping in the Blowering Valley from all over. I don't know exactly where, but I would say – and there's no research to back me up here – but there would be moth-gathering sites here that belong to or were used by clans or whatever. This mob, you're getting up into the Namadji and Canberra mob. There may well have been people from Cooma went that way, a bit closer. That's our moth joint. It's funny, big ceremonial rings, big ceremonial rings. They're all connected, those big ceremonial sites. INFORMANT #4

Our people they just love the mountains because you know you could go in there and you could have a ceremony in there and it provided everything you needed. If you know what you're doing and what you're looking for you won't starve in there. And there's plenty of water to drink. And it's just a great place because our people were spiritual believers and believe in the spiritual side of things. So that's part of our intellectual property rights our beliefs. And the fact that the old fellas they all had men's business in there and did the karingals. Yeah, and the fact that our people got up high into the crevices to get the moth. The whole lot of it is important to us. The whole landscape in the Snowy Mountains is important to Aboriginal people.... we've got spiritual connections to it. INFORMANT #5

Q: Do the horses impact to the archaeological sites?

They can scatter. They can get into places where we have a lot of burials. And other artefacts scattered or other cultural material on the ground. They just trample everything down. And then once they've trampled things down or they move sites into the waterway and things float away. You can't count the impacts because they're pretty great. They do an overall damage. So, anything they do, because they're a hooved animal, any hooved animal is going to have an impact on our cultural heritage. INFORMANT #6

They could be impacting on archaeological sites. But I guess at the end of the day if we're not finding those sites well then, we don't know. But yeah, it'd be a pity to think that if you found a really important site and it had been really impacted by the brumbies that'd be a shame because once the site's gone it's gone. INFORMANT #5

Well look just at their footprint. Just their footprint is damaging sites. They really do a lot of ground disturbance. So, imagine that happening over this area. Now one of the really rich sites, I think it's called Scotts on this side of the river, really rich artefact sites, all along this river. The evidence of occupation and movement along here is very evident. But that's what is being impacted. They're contributing to the erosion up there where they're coming in and they're drinking. So, they're damaging that. INFORMANT #3

They're chewing the bark on a living scar tree – an Aboriginal cultural heritage item. I've also seen, since they've increased in number, where they've trampled archaeological sites, artefact scatters, and disturbed them, and stone arrangements. One of the main ones, I can't tell you whether it was wild horses or domestic horses, because people ride their own horses in that area. That's one of the huge, biggest stone arrangements in South-eastern Australia. There's a series of rings and pathways and all that. I went up there after the 2003 fires and that's what I'm basing this on, and there had been horses up there. Whether they were feral horses, I don't know. There were at least two stones arrangements, small ones, which have been knocked over by horses. I've tracked it. There's a horse path right next to them. I have seen numerous artefact scatters that the erosion damage had been amplified because of wild horses. The rabbits started it in 1890, but the horses just amplified it. INFORMANT #4

The Snowy River is almost a continuous artefact scatter, almost. you can go along that river and almost continuously find artefact scatters. The rabbits caused a lot of damage in erosion gullies. Now with the increased number of horses, you have the horses grazing up in one of those erosion gullies and wants to get out, a horse will just go uphill, but as he goes, boom-boom. He digs a little trench and next time it rains there's another little trench...Especially in the drought and so on and with the increased numbers of horses, that's causing more erosion. INFORMANT #4

This was 1983 or something. We built these big exclusion plots and there were no deer, very, very few horses and no pigs. There were just rabbits. I forget what they were, 20 x 20 metre exclusion plots, like fencing, and everything started growing back. They've had to extend them so the horses can't eat them now. That wasn't even a consideration in the 1980s with horses feeding in them. The point was that the rabbits, sheep and cattle, but the rabbits in particular – started the erosion. This was down the lower Snowy River, not up here necessarily. As they got rid of the rabbits, it started to stabilise. This is the huge erosion gullies were caused by the rabbits eating all the vegetation. They sort of stabilised, but now with the big increase in brumby, wild feral horse numbers, they're doing what I said, fleeing up the gully. If a horse gets frightened or decides to get out and go somewhere, they just poof up the bank and you can see where their hooves- It's granite soil which is quite loose. If a horse goes up a steep bank like that high, it collapses. Then next time it rains, there's another little erosion gully into the big erosion gully. No, where those erosion gullies are, there are probably artefact scatters that have already been partly damaged by the original erosion in 1900, and it's continuing to happen because of the horses. Plus, horses, it might sound stupid and they don't have steel shoes, but I've seen actual artefacts that have been broken by horses treading on them. A lot of the artefacts down there are silcrete and a lot of the blades are a couple of millimetres thick,

and I won't say I've seen hundreds of them, but I can remember seeing one where I said a bloody horse broke it. That's been sitting there for a couple of thousand years and the bloody horse comes and treads on it and breaks it. We're losing enough from all the other things that are happening, you don't need more. They are actually physically causing damage with their erosion and shitting all over sites...Just big piles that deep, on a site where my ancestors used to camp/live. INFORMANT #4
Kalkite, Botheram Plain, Gungarlin River. There are archaeological sites all through here and a lot of them are associated with creeks and waterways, and not all of them, but there would be archaeological sites that have been impacted by horses. That's as important as Mumbulla Mountain, that mountain. There's stone arrangements and I don't know if horses have been up there... but there are artefact scatters and sites up through there, artefact scatters that I would almost guarantee, not all, but at least some of them would have been affected by horses. INFORMANT #4

I am concerned. I'm concerned with how the horses have affected any of the archaeological sites in there, because I've had a connection and this is not because of my family, well it is in a way. I'm concerned about all those sites all through there and the effect horses have had on those sites. I was only using Gungarlin as an example. The Gungarlin River I know in the old days, there's a crossing on the fire trail or the road, which is a bush track, but that's also where the horses crossed. If a horse wants to step up something that big, they will. They'll clamber up, especially the dumber feral horse, and there is a chance they're treading on artefact scatter, which is now in the river...sit in the water, but it sat there on the edge of that riverbank since someone put it there whenever, and the stupid horse has moved it. All the archaeological material is there. You can maybe work out what it was, the story about it. I'm only using Gungarlin River as an example that goes all through there, Long Plain, Peppercorn, all that. INFORMANT #4

Where the main infestations are, when it first started, and other people might tell you other ones, but the ones we're concentrating on are down here on the Snowy River. I've seen the damage they've done, archaeological material and sites, stories. INFORMANT #4

4.4 Aboriginal people's opinions on the ongoing management of wild horses

Q: Is there anything NPWS could do better in relation to managing the impact wild horses are having on Aboriginal sites in KNP?

Whether people want to get rid of them altogether or try to maintain number levels, but if you just let it get out of control, I'm pretty sure they would impact heavily on us...if they're running through sensitive areas boggy areas, they could obviously be destroying habitat for other sensitive creatures and plants. And also, it could create erosion where you start getting bits of the land through heavy rains and that washing away. So yeah, there's a lot of things that if they're out of control and there's too many of them, they could actually do a lot of damage. INFORMANT #5

I don't have a problem with culling so as long as it's done humanely. Well, when the four ways that they've identified, trapping, removing, rehousing and the knackery, and the humane way they told us they'd do it was through aerial herding and that they then have gun shooters that would do it. And at that time, they had looked to other places like Canada in that last plan, that they talked about

strategies that enabled them to manage the horse population. So, I don't know since the last time I talked about this whether the horses are growing in exponential numbers or whether they are decreasing. INFORMANT #2

I'd like to see no horses in the park but that's not going to happen. I think any type of reduction in the horse numbers would be a plus, not only for our cultural heritage and the environment, but the basin communities that rely on the Murrumbidgee for their water source. But we've got to find a sort of balance between our traditional custodianship of the country and then other interest groups use of the country. And from a cultural sense, one area is not any more important than the other because it is all a cultural landscape. So, the whole landscape is a cultural feature. So, we can't just say oh you can put them here or you can put them here. And it's a story attached to the cultural landscape the actual land formation. And the plants are another added feature. So, there's layers and layers that define a cultural area. And the whole Snowy Mountain area, like up in the high country, it's all culturally significant because they've got a ceremony area in summer months. It's where the men met for their business and the women camped. And we collected a lot of the plants and we relied on there being a sustainable supply of things so that we could stay up in the mountain. So, it's really hard for me to say one particular area is more important than another, because all areas are culturally significant. INFORMANT #6

It is a big area and I would prefer them to be away from the start of the Murrumbidgee River. That spring where the river starts. I wouldn't like to see them around the main range. It's the only alpine area we have in Australia. That needs to be protected. Yarrangobilly and the headwaters of the Murrumbidgee, Goobarragandra and the Goodradigbee should be excluded from horses. This area is very sensitive. From here, the Murrumbidgee becomes the water supply for Canberra, the Goobarragandra is the water supply for Tumut and the Goodradigbee goes to Yass. We have to look after these places. INFORMANT #1

I'd say remove them, by whatever humane method possible. The RSPCA and others have said aerial shooting is a humane method. If you're trapping horses and they're likely to damage themselves and be in a trap, you can't be sitting there right at the trap, catching them. They're going to injure themselves. Running brumbies injures them and injures your own horse, regardless of how good you are in what you do. I'm not saying shoot them all, I'm just saying they should be removed totally, using the most humane method. To zero. That's my opinion, and write a book about how they were part of the landscape for whatever it was, a hundred years. I hope someone finds out for me one day when the first actual recording of mobs of wild horses were in the mountains. I reckon it would be a hundred years ago. INFORMANT #4

It seems to me the tension is there between the environmentalists and the people who want to protect the history of the brumbies and their place in that landscape, even though it's an introduced place in the landscape. People are wanting to protect their respective history. And the other faction fighting for the environment and the significance. And I think what we've got to find is just some common sense in all of this because for us they're not talking to us, apart from this conversation. All those interests they're not. There are complexities being layered upon complex issues. INFORMANT #3

It's not just getting rid of the horses, so the damage they do to vegetation and waterways, but it's also the damage that horses can do to cultural sites. And it's identifying those areas. The problem is that there are places that are secret. And there are places that are generic in terms of camp sites and stuff like that. And if there are ceremonial places on the mountain then they need to be protected going into the future from horses. To disturb a cultural site is against the law. So, I'm sure it's probably against the law for those sites not to be protected. Well, it comes back to how Parks perceive their role in management. It's not just about the horses. It's about their legislative responsibility to the cultural heritage of that place with traditional owners. INFORMANT #2

There should be a widespread archaeological survey involving local Aboriginal sites officers and archaeologists to fill in the gaps where no survey has taken place. The process could also involve training the next generation of sites officers. INFORMANT #1

They need to cull. Also, I'm a big believer in if you're going to try and stop something put some vegetation in. Put some vegetation in that stops them accessing where you don't want them to access. So maybe more re-vegetation. And restoration of all the areas that have been impacted with the native vegetation that's from the area not something we're going to bring in. Do a bit of research into the plants that are from that area and then land culturally sustainable again. INFORMANT #6

It is pointless saying fence off the sites. If anyone said, why don't you fence off the archaeological sites, that's an adverse impact on the site and the general visual of the site, and it's unnecessary. And it would be extensive, it would need a huge archaeological survey of the whole park and find out which sites are actually being impacted by horses. The only thing I can think of that they can do to protect the sites is to remove the horses. INFORMANT #4

The head waters of the Murrumbidgee are one of the main concerns we have but there's a lot of other areas. Like when you drive around the park you can see the damage...because the horses have to cross those little waterways, the creeks and the streams, and there's a lot of those in the National Park. So, it's not one particular place. We'd have to try and manage it all where you manage in the whole system across KNP. INFORMANT #6

Aboriginal people we think ten twenty generations down the road, then common sense has got to prevail. People have got to start working together. There's got to be a point where we can say what's a manageable number of brumbies and where would you manage them. They can't just keep running all over the park. I know it's a big tourism thing because every time I drive up around that country you have tourists from the city out with their cameras, because they've romanticised the brumby haven't, they on TV and in different television shows. It's become a real Australian icon. Which is possibly why you get all the uproar when they start any type of culling because people that don't actually live around the mountains, they're influenced more by the media than anybody because they don't have any firsthand experience of what's the actual impact of the brumby. INFORMANT #6

If they're going to go to the trouble of building fences and exclusion around the corroboree frogs to protect them, why don't they just build a big paddock in the middle of the park and keep the horses there? If people want to see wild iconic brumbies, put them in there. Say here's 200 hectares in Kosciuszko National Park – not my bit, someone else's! Say here, that's the brumby reserve, and any brumbies wander off it, they're not welcome. They're going to the trouble of building all exclusion plots for plants and for the corroboree frogs, reverse it. Build a big plot for the brumbies. We've set aside so many hectares. I can think of places actually, ex-grazing properties that have been incorporated in the National Park. INFORMANT #4

Like we've got the oldest living culture. Like we've had sixty seventy thousand years of managing this country. So, we talk in terms of not one generation we talk in terms of lots and lots and there's been thousands of generations of Aboriginal people caring for this country. And hopefully there'll be thousands more after us. And this is the crunch time, I think. A lot of introduced species are impacting now in a negative way. Do we recover from it? How do we manage it? And we can't do that unless we have partnerships between Aboriginal people and the other users, the other interest groups. It's got to be a partnership because it won't work otherwise. INFORMANT #6

We try to be careful when we go on country, not to leave rubbish, not to take too much, and just to be respectful of all that's around on our country. I'm not in favour of killing animals and just to see roadkill annoys me. It makes me very sad that an animal's been killed. But I think if they were to be removed in some humane way that would be fine. If an animal's injured certainly putting them out of their misery. INFORMANT #1

There's no one answer to fix the problem I don't think. There's no quick fix. And it's going to take a lot of people a long time before there's some sort of manageable plan than just saying you either do it this way or that way. Yeah, that's not going to happen. Like I said it won't happen overnight. It'll take years. Do a management plan and if sometimes you can't eradicate it then you it has to be a manageable problem. Any impact on culture is a big impact. INFORMANT #6

I think we should go and look at what areas are particularly, like to my knowledge we haven't been here and had a look at the impact for a long time. Maybe we need to go down and check the impact. But what I'd like to see is perhaps another sort of a survey done but an impact survey rather than an id survey. And that a cultural management plan be mapped across this area. Identifying perhaps some priority areas for protection. But that's going to take a little bit of work. So, with all the funding opportunities that are flowing perhaps can that be a recommendation. You look at the Snowy River, so you've really got to go to where that starts. And is there any impact up there? I don't know. But you've got all these sites that are registered, archaeological sites. INFORMANT #3

There are plenty of people in the family who have horsey backgrounds. And I've been trying to get onto them but I haven't been successful, that have horsey backgrounds and have that affinity with horses. And I know with my Mum and that that any animal they have a soft spot for. Mum and I differ in view in that she thinks that the horses they're not hurting anyone, where they live isn't

hurting any humans, and that they have a right to life. So, it's a bit more about that. Then when I talk to her about the damage, they're doing up on the park then she thinks that rehoming them or removing them through humane ways is the only way to manage them. INFORMANT #2

Q: How should NPWS engage with the Aboriginal community about the management of wild horses in KNP?

We need to change how Parks engages with the traditional owners because until we started going up there the only works that were done were done mostly as cultural heritage site works and therefore, they looked to the four Land Councils that have boundary areas over that park and there's never been a proper recognition of traditional owners as opposed to Land Council. It's very disrespectful for the government of New South Wales not to recognise like everybody else is doing in the country that the traditional owners of country have rights. INFORMANT #2

It's very difficult to get agreement. I think they're dealing with a lot of different views and I know that they do listen and that they're patient in trying to find solutions. And I think they're doing a great job at the moment by even just having consultation which is good. I think that there should be involvement because it is new to our culture. Wild horse management is new to our culture and something that we have to deal with as well. Keep us informed. INFORMANT #1

They could be talking to key people in the community, traditional people. I don't like saying it but they could send a newsletter through the Lands Council to inform them. But every now and again. INFORMANT #5

I think that maybe if we approached it somewhat differently. You have the scientific committee for example, and there's no doubting the evidence base that those scientists bring to the table in terms of the management needs. I think there's our traditional history, but you can't deny the shared history, and with that shared history comes shared values. But I see there is room for common ground. That historic Snowy Mountain brumby area is an important part of our history, our shared history. And I think, much the same as we as Aboriginal people want our story and our culture and our history valued, I think that's true for those other people. Any feedback to National Parks is sure they won't get any disagreement in terms of land management and the significance of caring for country, but we do have to be mindful that there are other shared histories and that I think we have a responsibility to value those in some ways. And perhaps that heritage centre is a way to do that. Because how quickly has that community changed demographically. So, I understand a little about why people want to fight to retain. But I see that something like that heritage centre and supporting that really becomes the keeper of those stories. INFORMANT #3

What are the issues around those cultural sites in terms of management and that we are able to work with Parks to not just talk about the issues that introduced animals create for Parks up there but their actual management and protection of cultural heritage sites on the park? The only time that cultural heritage is engaged with is if there's some development happening within the park. We have some strong opinions about it being very wrong number one. And that they are not taking that

issue as a serious enough issue for Parks in terms of our cultural heritage and our rights on country and our say. INFORMANT #2

So, we're always tagged on the end, the last lot of people to be consulted. That's because the other groups are strong lobby groups and their voices are heard more than the Aboriginal. The other groups have a business interest, ours is a cultural interest. They have a bigger voice than us on the media. Because I'm sure there's a lot of Aboriginal people out there that would like to have input if we had the resources, we don't have the resources. But they don't know in the first instance that a new plan of management is being done. I think you could do a summary and then add dot points. But sometimes that doesn't work because some things are more significant than others for different Aboriginal groups. But a brief summary sent out in layman language really INFORMANT #6

We have the capacity and the skill to contribute on the more complex management issue. And let's allow or let's facilitate a process for our voices to be heard a bit more consistently in the management space, not an ad hoc basis. It's about bringing people to the table to work with us to understand some of the complexities within our own community. But also, some of the dynamics that exist in terms of the relationships between Aboriginal and non-Aboriginal aspirations and things like that. I think there's work to be done in that space. We should be coming together around these more important to me you know more important big issues around cultural environmental cultural management. Because they're not separate things. INFORMANT #3

I think that knowledge of the sites which are mostly recorded or unrecorded because of oral history knowledge is something that is a particular responsibility of Parks...to protect the places and to protect the cultural heritage of the landscape. Parks make provision in their management of the landscape and the park to come through either the advisory committee or to have a separate Aboriginal advisory committee. But it's better not to have too many committees. The horses are in this area, what sites exist in this area that the horses could be damaging. How do we manage it? What protection measures do we put in place and what are the mitigation measures that we put in place for this cultural heritage. INFORMANT #2

We're trying to hold a couple of times at least a connection to country camp. So, people come. The last one was quite a large group of people, over sixty people came, for a weekend. At the Jindabyne Sport and Rec Centre. Most people live off country from up there. They can't really afford to buy a wooden shack up there even. Bringing people back onto country, and though it's happened a lot more with Parks in the last few years, bringing people back onto country to understand what's happening up there is really difficult and connection is really all people are asking for, to be acknowledged as traditional. If Parks establishes within Parks a way of having a unit that looks after the cultural business for them and feeds back to them and people are managed by it. It's just a simple case of having a unit in there. INFORMANT #2

Instead of government just always coming to us because we're the last bloody group left in the barrel. I want to get to the point where we're part of the planning, where we're actually in the first

group that's goes in the room. That's definitely what our aim is, that we're considered to take part in the management, and not later, not at the end of it, not at the last minute but right up the front. INFORMANT #5

Any government agency that does any work up there, including Parks, need to follow their own due diligence guidelines and identify who legitimately speaks for country. I'm very much an advocate for the Victorian model of right people right country. INFORMANT #3

National Parks have got to widen their scope of who they consult about issues such as the wild brumby eradication plan. We don't get any feedback on what's being decided. There's very little information coming through to the community from any of the advisory bodies. You really need the traditional custodians and the indigenous community to have a voice. And not just through government bodies. We're looking for a sustainable way forward. Like for the environment and our cultural heritage we've got to find some sustainable outcomes. INFORMANT #6

Q: Is there anything NPWS could do better in relation to acknowledging Aboriginal association with wild horses in KNP?

Is there an opportunity there perhaps for our young fellas to perhaps learn a little bit about the history of the wild horses and our history as part of that like the whole history? Is there an opportunity perhaps for some tracking or trapping and learning? I just wonder what opportunities that exist in there for young fellas particularly to learn some skills but through that process look at learning about country. INFORMANT #3

Q: How can you protect or acknowledge your intangible cultural landscape values?

Well, we do map those intangible values. And the cultural landscape. We walk a fine line between, because we get so many areas destroyed, what do we say and what don't we say. But we've got to talk because we need the protection. And that's why do these intangible areas and we just mark an area and we'll put a line around it. But we don't identify any actual sites that are in there. And that's most probably the way to go...you can record intangible areas without actually identifying a particular place but you can say what the cultural values are for that area. And what things would lessen the impact on those cultural values. So, if there's a landform in that cultural landscape, a particular landform, a particular plant, tree or animal, that is the cultural value of that area. And so that's how you manage that. When restoring a particular landform damaged by the feral horses, find a way to restore that landscape by planting back the vegetation which will bring back the animals that are no longer there. So, you've got to restore that country to bring that animal, bird or plant back into that landscape. So that's how we regenerate our cultural landscape from a cultural sense, that has been damaged by the feral horses. INFORMANT #6

I'd be really interested to know how they end up with their final zones, and particularly the management zones over these where the sites are. I'd like to see perhaps a cultural heritage management plan as an overlay or underlay to all of this as well. INFORMANT #3

You're supposed to, as a traditional custodian, be a custodian and look after everything. It's a bit hard when a lot of the vegetation has been chewed down by feral animals, including horses. That's one of the things that pro-brumby people keep saying – what about the pigs and the deer? That's a ridiculous argument. They're all contributing to the damage, so should work on all of them. Kankite is one of them. Same with a fair few places in Babbo. Important spiritual places, it's got to the stage now, because of the terrain and the nature of Kosciuszko, unless we get help by government, National Parks, to take young people to any of those places, it's almost impossible now. INFORMANT #4

Q: Do you have any thoughts on how Aboriginal people could become involved in managing wild horses in KNP?

If we had some land, we were working we could be looking at how we could take the horses there and how we could use them in farming or shipping them off for some other type of industry. But we're looking for some land for the traditional owners. And that's what I'd like to see and get our young people back onto the land and working with animals and make the farm or the property work to support itself. INFORMANT #5

As far as getting involved in the horse removal, advise on the cultural aspects. They should be involved saying 'if you're going to be trapping or removing horses or whatever method, we know there's a big artefact scatter at this place, so don't set up a brumby trap there, please'. A lot of this, you could do sitting in a Jindabyne office with a map. INFORMANT #4

I don't know if they're being rehomed as many. Land Councils throughout Wiradjuri area or throughout New South Wales could become a part of the solution to taking some of the rehomed horses to different places. Since horses have been introduced into Australia Aboriginal men have been stockmen and I daresay Aboriginal women as well having been working on stations. So maybe they could be sent to those places or if there's a school. I know there's a school for shearing. There could be a school for horse riding and stockmen. There may be some Aboriginal organisations who have young people that may be homeless or we have a place for young boys close by that are having troubles they go there and try to sort things out. INFORMANT #1

Maybe there's some way to start up a different economy for Aboriginal people in the brumbies. There's no way you can have a sustainable ecotourism business with horses. INFORMANT #6

I think there is an opportunity for employment. There's an opportunity there to create that partnership. The traditional custodians getting people back on country, and being involved in restoring the land. And that's our cultural practice and that's our cultural right. And that's our cultural responsibility. We are responsible for maintaining that cultural landscape for future generations. INFORMANT #6

I think it's important that the Aboriginal Management Advisory Committee has eyes on the ground to look at things...Rather than just being told. A lot of the places are culturally sensitive. And these are issues that need to be considered in the management of the other issues within the park. So, any damage caused to the waterways and vegetation, and vegetation includes medicine vegetation, bushfood medication, medicine and bushfood, around the waterways on the country is an issue as well as cultural sites in terms of management of the park. INFORMANT #2

I would say that would be a really good suggestion and recommendation to do more archaeological surveys. But we need traditional owners if that's going to happen and we also need an elder with the group. The areas where it's more sensitive like boggy areas, wet areas, areas we might identify as a potential place where ceremonies were held, a men's place, a women's place, an Aboriginal Place, the significant sites. I'd recommend that Mount Kosciusko become an Aboriginal Place. INFORMANT #5

5.0 Findings

The following findings are based on:

- the four key investigation themes
- a small but broad sample set of interviews with Aboriginal people
- contextual understanding of ethnography and archaeology
- a correlation of archaeological, ethnographic and oral history/interview data, and
- an understanding of the legal and social context of the study.

5.1 The current awareness of wild horse management

The current awareness of wild horse management amongst the Aboriginal community ranges from low to high and is dependent upon individual people's current or prior engagement with park management and how frequently they visit the park for social/cultural purposes.

All participants opined that the low numbers of wild horses in the past posed less threat to their cultural heritage compared with the high numbers present today.

Overall, participants did not hold a comprehensive understanding of the content of the current wild horse management plan and how it is implemented. Some participants knew particular past management strategies such as shooting, trapping and rehoming. A few participants held comprehensive understanding of the current management arrangements compared with historical approaches.

Most participants were aware that the management of wild horses in the park had become politicised which they felt had hindered the management of wild horses. Their understanding of horse numbers was generalised as 'increasing' or 'too many', whilst knowledge of horse population locations was more specific. Information exchange between NPWS and the community on the issue of wild horse management seems to be centred around existing advisory groups, so individuals and families not involved in these groups were less informed about the issues.

5.2 The value of wild horses to Aboriginal people

Aboriginal community views on the value of wild horses in KNP is founded in historical association and personal experiences, however, a deep cultural heritage connection does not appear to have been formed between Aboriginal people and wild horses. Wild horses have not been incorporated

into the Aboriginal social system or cultural practises in this region in the same way other introduced species have elsewhere in Australia (such as the donkey in the Central Desert)²⁵.

According to the participants, Aboriginal people's connection to the horse in the Australian Alps is historical and the key feature that distinguishes Aboriginal and non-Aboriginal historical connections to horses is that historically Aboriginal horsemen held detailed knowledge of the landscape, as custodians, which assisted them in moving efficiently through the landscape, on foot and later on a horse.

All participants considered there to be a clear distinction between horses that had a purpose and were owned by someone, that is the domesticated horses that were used for stock work, police tracking, brumby running and transport, and the horses that were unowned and had no purpose, becoming wild. A sense of pride and achievement was gained when a wild horse was trapped and domesticated, becoming used as a means of transport and owned by someone. Capturing and selling wild horses was an important way Aboriginal people could participate in the local economy.

Aboriginal people's historical association with domesticated horses involved the pastoral industry, police tracking (including leading a search party for lost men at Seaman's Hut) and transport. Aboriginal people's historical association with wild horses revolved around brumby running, trading and taming horses for personal use.

Aboriginal and non-Aboriginal people hold shared historical associations with wild horses, as well as domesticated horses. These shared values and stories validate their connection to place and form part of their identity. The distinguishing Aboriginal use of the domestic horse was linked to the Aboriginal riders holding detailed knowledge of the landscape, as custodians, which assisted them in moving efficiently through the landscape.

Aboriginal people's attitudes towards wild horses have shifted over time as a result of the increased numbers causing increased impact to the landscape. This change in attitude is evidenced by a change in how some Aboriginal people refer to wild horses; in the past they were referred to as 'brumbies' whereas today they are referred to as 'feral horses' and grouped in the same category as other introduced species.

Aboriginal people hold an affinity with animals generally, as part of their world view, thus don't like to see any animals including horses suffer in any way.

Aboriginal people adapted during the colonial period; they used glass to make spear tips, preferred steel to stone axes and used horses to travel.

²⁵ See discussion in Mitchell 2015

5.3 The impacts of wild horses to Aboriginal cultural heritage

Whilst the historical association Aboriginal people have with horses across KNP is important to the participants and should be acknowledged, the protection of significant ancient Aboriginal heritage sites and cultural landscapes, inclusive of tangible and intangible values, is a key concern to the Aboriginal participants. Accordingly, the damage to Aboriginal heritage sites and cultural landscapes caused by wild horses in KNP greatly concerns Aboriginal custodians and requires urgent and active management to remedy.

All participants consider KNP as being part of a broader Aboriginal cultural landscape, all of which is culturally significant and important to Aboriginal people. The distinguishing feature connecting Aboriginal custodians to KNP compared with other groups in society, is that Aboriginal connections have an ontological base, that is they are founded in an ancient religion which exists in many forms today.

There is a vast network of ancient pathways linking places and people across the region, in all directions. There are places where people gathered to trade, for ceremony, to arrange marriages, for social events and to settle differences. The seasonal collection and use of a wide variety of natural resources for cultural purposes, such as bogong moths, is an important way Aboriginal people continue to connect with their country. Visiting and caring for important ritual places and landscapes, including waterways, ensures country is kept healthy for future generations, cultural knowledge is transmitted and spiritual connections are maintained. The use of original places names, where known, is another important way Aboriginal custodian can maintain their link to their cultural heritage, as is being able to undertake cultural practises on country.

Aboriginal people also hold important cultural connection to the tangible items left behind by their ancestors, to the archaeological record. The cultural narrative, based on the archaeological evidence, becomes integrated into Aboriginal people's contemporary identity and forms the basis of their connection to their land and to their cultural heritage. Often, past ancestors and their actions are referred to in a collective sense inclusive of the current generation; 'we' rather than 'they' dropped or placed these items on the ground a long time ago. When reflecting on the time taken to create the archaeological record compared with the time associated with colonial dispossession, relocating objects or damaging objects, a sense of sadness is felt by Aboriginal custodians.

The loss of cultural knowledge caused by colonisation and dispossession correlates with the value Aboriginal people place on the physical items left behind by their ancestors. This strengthening of cultural attachment to archaeological objects is particularly more evident in places where the colonial frontier was violent and lead to a fragmentation of cultural knowledge. Excavating sites for development activity is seen as a culmination of colonial impact. Moving the objects away from country for storage and or display is also viewed as a further loss. For the participants in relation to archaeological sites, once they are gone so too is the tangible evidence that connects people to their ancestral past. There is a sense of sadness and disempowerment that ancient Aboriginal cultural

heritage sites and landscapes are being destroyed and can't be replaced. Future generations will not be handed the heritage that was handed to the present generation of custodians.

In terms of the impact wild horses are having on *intangible* Aboriginal cultural heritage, of key concern to participants is:

- the damaged caused by the large numbers of wild horses trampling fragile vegetation types and spring waters surrounding the headwaters of the Murrumbidgee River and the Lower Snowy River
- defecating on traditional camping, meeting and teaching places
- the cumulative impact of trampling certain species which effects cultural practises which rely on those species
- the fear that wild horses may gather on or near burial sites
- defecating and dead horses polluting water ways, and
- how the large numbers of wild horses affect how Aboriginal people can enjoy their country, as they interfere with and distract from the practises being undertaken.

Some of the important spiritual and ritual places are in locations at high altitudes where horses don't commonly go. In this way, these important places are protected from the impact of horses because of the terrain.

In terms of the impact wild horses are having on *tangible* Aboriginal cultural heritage, of key concern to participants is the damage caused by wild horses trampling river banks containing artefacts which are dislodged and fall into the watercourse and wash away. Participants were gravely concerned about the impact wild horses are having on ceremonial stone ring sites and scarred trees.

Overall, in terms of impact to Aboriginal cultural heritage, the participants consider all introduced species that are doing damage to country in need of active and urgent management, including pigs, deer, and rabbits, but the greatest concern relates to wild horses given their large and increasing population.

5.4 Aboriginal people's opinions on the ongoing management of wild horses

A wide variety of opinions on the ongoing management of wild horses in the park were expressed by the Aboriginal participants.

The need to reduce the numbers of wild horses in a humane manner is favoured and the need to do so is urgent given the evidence suggests Aboriginal cultural heritage is being damaged on a daily basis and in a cumulative manner.

There is a potential for Aboriginal involvement in horse-associated industry (outside KNP) on already disturbed land of low cultural value.

Participants would like to see an increase in Aboriginal participation in managing the impact of horses on Aboriginal cultural heritage sites and landscapes by supporting custodians to exercise their responsibilities to care for their own country.

Whilst it is important to keep wild horses out of places that are ritually important to Aboriginal men and women, participants expressed the view that it is just as important to ensure that any restricted cultural knowledge that is shared for the wild horse management planning process is respected and stored in a confidential manner.

Participants welcomed the current opportunity to have input into the management of wild horses in KNP.

5.5 Summary of important cultural places identified in interviews/oral histories and checked against other sources

Table 1. Summary of important cultural places from interviews

#	PLACE NAME	2020 INTERVIEWS/ ORAL HISTORIES	ETHNOGRAPHIC RECORD	ARCHAEOLOGICAL RECORD	SOURCE/S
1	Peppercorn Hill/HEADWATERS of Goobarrandra/Yarrangobilly and Murrumbidgee Rivers	✓	✓	57-4-0039 is an artefact scatter on Fiery range not far from Peppercorn Hill	INFORMANT #1; INFORMANT #6
2	SPRING at the Headwaters of Murrumbidgee	✓		57-4-0106 artefacts not far from headwaters	INFORMANT #1; INFORMANT #6
3	Murrumbidgee River	✓		Sites are recorded	JoH 2007; INFORMANT #1; INFORMANT #6
4	Tantangara Mountain	✓	✓	No records	INFORMANT #4; Knight 2010
5	Coleman /Blue Waterhole	✓	✓	Burial in Coleman caves	INFORMANT #1; INFORMANT #4; INFORMANT #6; Boot 2004, Cooke
6	Pullelop/Pulletop (aka Burkes Creek)		✓	Outside of KNP	Boot 2004
7	Yarrangobilly locality including caves	✓	✓	Numerous sites, including a 9,000-year-old site	INFORMANT #1; INFORMANT #4; Waters 2002; Knight 2010
8	Woragong Trail	✓		Off Proser Trail north west of Yarrangobilly; 56-6-0325 scarred tree on trail	INFORMANT #1;
9	Mt Jagungal		✓	No archaeological record. In wilderness	Knight 2010; Kabaila 2005
10	Mount Guthrie			✓	Flood 1980

11	Mount Carruthers			✓	Flood 1980
12	Jounama Creek	✓		56-6-0053 and 56-6-0052 on creek, artefacts; earth rings in hills above creek	INFORMANT #1
13	Long Plain	✓		Numerous sites recorded recently during Snowy 2.0 investigations	INFORMANT #4
14	Bogong Mountains	✓		Bora ground	INFORMANT #4; Waters 2002; Knight 2010; Boot 2004.
15	Blowering Valley (Tumut River valley)	✓		Numerous sites recorded on both sides of valley	INFORMANT #4
16	Blowering	✓		See above	Waters 2002
17	Kiandra		✓	A few small artefact scatters and possibly a place where stone was quarried	Pearse 1896 cited in Knight 2010; Boot 2004.
18	Goobarrargandra [Cobaragundra]		✓	In wilderness area; 56-3-0071 and 56-6-0003 artefacts. Below Bogong peaks probably a route (camp)	Boot 2004; INFORMANT #1
19	Start of Goodradigbee River (Mt Morgan)	✓		See above	INFORMANT #1; INFORMANT #4; Knight 2010
20	Yallowin	✓	✓	Next to Blowering dam. Sites recorded and important meeting place.	INFORMANT #4; Wilkinson 1970; Waters 2002
21	'Peak of Carangal' [Karingal]		✓	UNSURE OF LOCATION	Boot 2004
22	Nungar Plain/Mount/Creek [Nungar/Nangar]		✓	No sites but Nungar creek flows into Tantangara dam which has large numbers of recorded sites	Boot 2004
23	Dicky Cooper Bogong		✓	No recorded sites	Kabaila 2005

24	Mount Twynam		✓	No recorded sites	Kabaila 2005; Government Gazette 2016.
25	Little Twynam			Moth pestle on Little Twynam	
26	Big Bugong/Toolong Range	✓		No recorded sites	Wesson 2000
27	Mt Kosciuszko	✓		No recorded sites	INFORMANT #5; INFORMANT 6; INFORMANT 3; Kabaila 2005; Boot 2004
28	Kalkite Mountain	✓	✓	No recorded archaeological sites, sites at bottom on river	INFORMANT #4; Wesson 2000; Government Gazette 2016.
29	Botheram Plain	✓		62-1-0120 artefacts	INFORMANT #4
30	Gungarlin River	✓		62-1-0121 artefacts	Wesson 2000
31	Perisher Valley			numerous small artefact scatters	Flood 1980, and see Section 2
32	Lubra Rocks/Thredbo Diggings	✓		Numerous sites in vicinity of Thredbo diggings. 61-3-0014 ²⁶	INFORMANT #4; INFORMANT #3
33	Island Bend	✓		No recorded archeological sites	INFORMANT #3
34	Pinch River	✓		Numerous artefacts	INFORMANT #3; INFORMANT #4; See Section 2
35	Jacobs River	✓		✓	INFORMANT #3; See Section 2
36	Wollondibby			Lake Crackenback has 4,000-year-old site	INFORMANT #4; Kamminga 1992
37	Junction of the Snowy River and Wollondibby Creek	✓	In ethnography Grinding grooves	Now under Lake Jindabyne	INFORMANT #4; Kamminga 1992 Chapman 1976
38	Thredbo Valley			numerous recorded artefact scatters	Kabaila 2005. See Section 2
39	Brassy Mountains			61-3-0020 Finns River saddle artefacts	Kabaila 2005

40	Lower Snowy River	✓		Many recorded sites	INFORMANT #3; INFORMANT #4; Waters 2002; Kabaila 2005
41	Byadbo Mt	✓		Artefacts recorded Byadbo Ck	INFORMANT #4
42	Ingeegoodbee Track	✓		In Pilot Wilderness in NSW (see above)	INFORMANT #3
43	Tom Groggin campsite	✓			INFORMANT #3
44	Geehi campsite	✓		Artefact scatters recorded in campground on river	INFORMANT #3
45	The Pilot	✓		61-6-0002 artefact Tin Mine Creek	INFORMANT #3; INFORMANT #4
46	Rings Creek	✓		See bogong mountains bora ground	INFORMANT #4
47	Headwaters of Corrowong Creek	✓	✓	nothing on creek, but artefact scatters nearby on Tingaringy and Karachi fire trails	INFORMANT #5; Flood 1980

Table 1 contains 47 named locations /features/places. Of these 12 or 26% are mountains or mountain ranges. With the exception of two, Tantangara Mountain in the north and Byadbo Mountain in the south, the rest are located in the centre of the park, many associated with the Main Range. Table 1 has been compiled by checking whether places mentioned by informants also have an archaeological signature. Table 1 does not include areas with archaeological sites not mentioned by informants, e.g. Lobbs Hole, Ravine. As such the places in this table relate to intangible values, some also associated with tangible values.

Legend

Upper Murrumbidgee and associated landscapes– proposed eradication zone to protect cultural values

Blowering/Yellowin

Eastern side of KNP, valleys and Jindabyne plain

Lower Snowy and associated landscapes - proposed eradication zone to protect cultural values

6.0 Recommendations

6.1 Relating to Aboriginal cultural heritage management and wild horses within KNP

As a way to *manage the identified impacts of wild horses on Aboriginal cultural heritage in Kosciuszko National Park* the following actions are recommended:

1. Reduce the number of wild horses across the entire park to a level that ensures intangible Aboriginal cultural heritage across the landscape is safeguarded into the future.
2. Develop a new wild horse eradication zone in the Peppercorn Hill/Fiery Range area to protect the headwaters of the Murrumbidgee and Goobarragandra Rivers. This zone is essential for protecting the intangible Aboriginal cultural values associated with water and will enable Aboriginal custodians to care for their country. This would be a new zone that is complementary to the asset protection management zone in the 2016 draft wild horse management plan. This zone is not a defined line between what is and what is not valuable; it is indicative of particular values within a broader landscape of cultural significance to Aboriginal people. Further research is required to define the boundaries of this zone hence no map has been developed at this stage.
3. Develop a new wild horse eradication zone to encompass the valley of the Snowy River north of the Victorian Border. This zone is essential for protecting the archaeological values associated with the Snowy River. This zone is new and is largely consistent with the asset protection management zone in the 2016 draft wild horse management plan. This zone is not a defined line between what and what is not valuable; it is indicative of particular values within a broader landscape of cultural significance to Aboriginal people. Further research is required to define the boundaries of this zone hence no map has been developed at this stage.
4. Maintain existing (2016) eradication zones around Mount Kosciuszko, Nungar Plain and Kalkite Mountain to safeguard intangible Aboriginal cultural heritage across these landscape into the future.
5. Maintain existing (2016) prevention zones in the Bogong Peaks Wilderness Area and in the Jagungal Wilderness Area.
6. Identify and maintain other horse exclusion areas where significant cultural and/or archaeological sites exist e.g., within the larger Pinch River camping area there is a relatively

undisturbed area containing artefacts. This area should be fenced off or protected through the planting of a dense vegetated screen.

7. Establish statistically and scientifically valid monitoring experiments to quantify the impacts of horses on artefact scatters.
8. Undertake targeted archaeological surveys involving the training of new Aboriginal sites officers in accessible locations where no surveys have occurred and where there are likely to be sites.
9. Engage Aboriginal sites officers to monitor the impacts of horse trampling on archaeological sites.
10. Engage Aboriginal knowledge holders to monitor impacts of horse trampling on a broad range of Aboriginal values across the cultural landscape, in particular, culturally important flora and fauna species, ritual sites and places associated with mythological stories.
11. Compile a list of culturally significant flora and fauna species as a way to further identify and monitor wild horse impacts to the Aboriginal cultural landscape.

In relation to *Aboriginal people's opinions about the future management of wild horses in Kosciuszko National Park*, the following actions are recommended:

12. Given there was limited Aboriginal participation in this investigation, Aboriginal people should be encouraged to have input into the 2021 draft wild horse plan of management. Printed and electronic copies of the draft plan should be sent to Aboriginal people and Aboriginal organisations across the region inclusive of Ngunnawal, Wiradjuri, Ngyimpaa, Ngarigo, Djirringanj, Walbanga, Thawa, Bidawal, Thaua and Walgalu people.
13. Ensure ongoing and broad engagement with the Aboriginal community about wild horse management, and in particular, enable Aboriginal people's involvement in the early stages of any management planning process.
14. Investigate options for the acquisition of land for Aboriginal people, neighbouring or close to KNP, to facilitate cultural revitalisation, to provide better access to country, to support increased involvement in park management and to provide a base for economic development (which could involve rehoming/taming/selling wild horses or an Equine Assisted Learning (EAL) program). The Indigenous Land and Sea Corporation's (ILSC) has a program called Our Country Our Future aimed at meeting social, cultural, economic and environmental objectives through land acquisition. The ILSC are ideally placed to facilitate

the implementation of this recommendation and to undertake community capacity building to ensure community aspirations are achieved.

15. Investigate the availability of Aboriginal owned land in the region that could be used for horse related Aboriginal enterprises including. The Indigenous Land and Sea Corporation (ILSC) can assist Aboriginal organisations who already own land to develop targeted projects (such as horse rehoming/selling/taming/Equine Assisted Learning (EAL) programs).

In relation to the *value of wild horses to Aboriginal people*, the following is recommended:

16. Document and formally acknowledge Aboriginal people's historical association with wild horses (brumby running, trading and taming horses for personal use), and Aboriginal people's historical association with domesticated horses involving the pastoral industry, police tracking (including leading a search party for lost men at Seaman's Hut) and transport, across what is now KNP. Acknowledge the distinguishing Aboriginal association with the domestic horse linked to the Aboriginal riders holding detailed knowledge of the landscape, as custodians, which assisted them in moving efficiently through the landscape.
17. Document and acknowledge Aboriginal and non-Aboriginal people's shared historical associations with wild horses. The proposed heritage centre or the existing visitors centre may be a good base for displaying these distinguishing and shared historical values.

As a way to *improve the awareness of wild horse management* amongst the Aboriginal community the following is recommended:

18. Create/reinstate a permanent position for an Aboriginal Liaison /Education officer for KNP
19. Reinvigorate 'Mountain Messages' newsletter as a way to distribute information regarding park management issues, including wild horses, to the community on an ongoing basis.

6.2 Relating to the broader KNP Plan of Management

Facilitate the resolution of tribal disputation by establishing traditional ownership and 'who talks for country'. Seek assistance from NTSCorp or a trained mediator. Other organisations across the region such as the Snowy Monaro Regional Council, also involved in Aboriginal cultural heritage management or need to engage with Aboriginal people more generally, may also be interested in participating.

Undertake an Aboriginal cultural mapping project across KNP that integrates documentary and oral history records.

Develop an Aboriginal cultural heritage management plan for KNP.

Review the Cultural Heritage Management actions in the KNP POM and determine what has been achieved to date.

Acknowledge and respect Aboriginal people's cultural connection to the past by storing salvaged archaeological objects locally as a way to maintain the specific cultural association between the object, the land, the past, present and future. Use salvaged objects for educational purposes, locally.

7.0 References

AALC 2007 Memorandum of Understanding in relation to the Co-operative Management of the Australian Alps National Parks.

ANUTech 1988 A Proposed Telecom Small Country Automatic Exchange (SCAX) Perisher NSW, Review of Environmental Factors. Report to Telecom Australia.

Aplin K, Ford F and Hiscock P 2010 Early Holocene human occupation and environment of the Southeast Australian Alps: New evidence from the Yarrangobilly Plateau. In: S. Haberle, J. Stevenson & M. Prebble, eds. *Altered Ecologies. Fire, climate and human influence on terrestrial landscapes*. Terra Australis 32. Canberra: ANU E Press, pp. 187–212.

Australian Alps National Parks [n.d.] Educational resource produced by Australian Alps National Parks about Aboriginal people.

Australian Heritage Commission 1997 National Heritage Convention: A future heritage places regime for Australia: synthesis of broad community views and AHC preferred system.
http://www.environment.gov.au/heritage/environments/current_issues/nhc/regime.html

Baliran C 2014 Trampling, taphonomy, and experiments with lithic artifacts in the southeastern Baguales Range (Santa Cruz, Argentina). *Taphonomic Approaches to the Archaeological Record*, Special Issue 1: 85–95.

Bambrick S 1992 Past and current water use in the Alps. In *Cultural heritage of the Australian Alps*, ed. B Scougall. Canberra: AALC, pp. 309–316.

Barber M 2001 An Archaeological Investigation of the Proposed Perisher Valley Water Augmentation Scheme, Kosciuszko National Park, NSW. Report to Nicholas Graham-Higgs Pty Ltd.

Barber M 2002a An Archaeological Investigation of the Proposed Perisher Valley Chairlift Upgrade, Kosciuszko National Park, NSW. Report to David Hogg Pty Ltd and Perisher Blue Pty Limited.

Barber M 2002b An Archaeological Investigation of Several Proposed Facility Upgrades, Perisher Blue Ski Resort, Kosciuszko National Park, NSW. Report to Perisher Blue Limited.

Barber M 2002c An Archaeological Subsurface Investigation of the Proposed Reservoir and Fill Line Snowmaking Facilities at Perisher Blue, Kosciuszko National Park, NSW. Report to Perisher Blue Limited.

Barber M 2003 An Archaeological Subsurface Investigation of the Proposed Ski School and Workshop at Perisher Blue, Kosciuszko National Park, NSW. Report to Perisher Blue Limited.

Barber M 2015 Aboriginal Cultural Heritage Assessment Report for Stage 1 Snowmaking, Smiggin Holes, Kosciuszko National Park, Snowy Mountains LGA, NSW. A report to Perisher Blue Pty Ltd.

Binford LR 1983 *In Pursuit of the Past*. New York: Thames and Hudson.

Blay & Cruse 2004 Eden Region Old Path Ways and Trails Mapping Project. Public Report. Unpublished report prepared for the Eden Local Aboriginal Land Council, the Bega Regional Aboriginal Heritage Study, NSW National Parks and Wildlife Service & Bega Valley Shire Council.

Boot P 2004. Historical documents relating to Aboriginal people in the northern and western parts of Kosciuszko National Park and surrounding region. Vols 1 and 2. Department of Environment and Conservation, NSW.

Bowdler S 1981 Hunters in the highlands: Aboriginal adaptations in the eastern Australian uplands. *Archaeology in Oceania*, 16: 99–111.

Bowdler S (ed.) 1982. *Coastal Archaeology in Eastern Australia*. Canberra: ANU.

Buggey S 1999 An Approach to Aboriginal Cultural Landscapes. Ottawa: Historic Sites and Monuments Board of Canada.

Brown S 2010 Cultural Landscapes: A Practical Guide for Park Management. NSW Department of Climate Change and Water.

Brown S 2012 Applying a cultural landscape approach in park management: an Australian scheme. *Parks*, 18(1): 99–110.

Byrne D. & M. Nugent. 2004. Mapping Attachment: A Spatial Approach to Aboriginal Post-Contact Heritage. Sydney: NSW Department of Environment and Conservation.

Chapman, V. 1977. The Jindabyne Valley in southern uplands prehistory: An archaeological investigation. Unpublished MA thesis, Australian National University, Canberra.

Clark I D (Editor) 2000 The Journals of George Augustus Robinson, Chief Protector, Port Phillip Aboriginal Protectorate, Clarendon Heritage

Context Pty Ltd 2014a 'Aboriginal Cultural and Spiritual Values Australian Alps Project Report', vol. 1, prepared for Australian Alps Liaison Committee and AATORG.

Context Pty Ltd 2014b 'Aboriginal Cultural and Spiritual Values of the Australian Alps Consultation Notes', vol. 2, prepared for Australian Alps Liaison Committee and AATORG.

Department of Environment and Conservation (DEC) 2007 Aboriginal women's heritage: Brungle and Tumut. Sydney, NSW.

Dibden J 2018 Snowy 2.0. Exploratory Works. Aboriginal cultural heritage assessment, Cooma: Report to Snowy Hydro Limited.

Dibden J 2019 Snowy 2.0 Main Works. Aboriginal Cultural Heritage Assessment Report, Cooma: Report to Snowy Hydro Ltd.

Douglass M and L Wandsnider 2012 Fragmentation resistant measures of chipped stone abundance and size: results of an experimental investigation of the impact of cattle trampling on surface chipped stone scatters. *Plains Anthropologist*, 57(224): 353–365.

Eren M et al. 2010. Experimental examination of animal trampling effects on artifact movement in dry and water saturated. *Journal of Archaeological Science*, 37: 30103021.

Fanning P, Holdaway S 2001 Stone artifact scatters in western NSW, Australia: geomorphic controls on artifact size and distribution. *Geoarchaeology*, 16: 667–686

Fanning, P., S. Holdaway and E. Rhodes 2008 A new geoarchaeology of Aboriginal artefact deposits in western NSW, Australia: establishing spatial and temporal geomorphic controls on the surface archaeological record. *Geomorphology*, 101: 524–532.

Feary S 2008a Aboriginal sites inspection, Charlotte Pass, Kosciuszko National Park. Internal NPWS report.

Feary S 2008b Proposed multi-use pathway between Bullocks Flat and Thredbo Village. Notes from archaeological field inspection. Internal DECCW report.

Feary S 2009 Report on archaeological salvage, Bullocks Flat – Thredbo Diggings shared pathway, Kosciuszko National Park. Internal DECCW report

Feary S 2019 Proposed duplication of a section of the Pallaibo Track, Kosciuszko National Park – addendum report: Report to NPWS, Jindabyne.

Feary S and Niemoeller G 2015 Lower Thredbo Valley Shared Path: Bullocks Flat to Curiosity Rocks, Snowy Mountains, NSW. Aboriginal cultural heritage assessment, Jindabyne: Report to NPWS.

Feary S and Niemoeller G 2017a Lower Thredbo valley shared path: Bullocks Flat to Curiosity Rocks, Snowy Mountains, NSW. Amended Report, Jindabyne and Berridale: Report to NPWS and Snowy River Shire Council.

Feary S and Niemoeller G 2017b Snowy Mountains Iconic Walk Project, Kosciuszko National Park: Aboriginal cultural heritage assessment. Jindabyne: Report to NPWS.

Feary S and Niemoeller G 2020 Snowy Iconic Walks, Kosciuszko National Park. Aboriginal cultural heritage. Addendum report for new section of walking track from Charlotte Pass to Porcupine Rocks, Jindabyne: Report to NPWS.

Field J H 2006 Trampling through the Pleistocene: Does Taphonomy Matter at Cuddie Springs? *Australian Archaeology*, 63(December 2006).

Flood J 1973 The Moth Hunters. Investigations towards a prehistory of the south-eastern highlands of Australia. Unpublished PhD thesis, Australian National University, Canberra.

Flood, J 1980. *The Moth Hunters: Aboriginal Prehistory of the Australian Alps*. Australian Institute of Aboriginal Studies, Canberra.

Fowler P J 2003. World Heritage Cultural Landscapes 1992–2006. World Heritage Papers 6.

Gardner P 1991 *Names of the Victorian Alps: Their Origins, Meanings and History*. Victoria: Ngarak Press.

Geering K 1981 Lower Snowy River archaeological survey. Jindabyne: Report to NPWS.

Geering K 1983 Archaeological Survey. Appendix J in Hogg 1983 Perisher Skitube Skifields Access System EIS.

Good R 1992 *Kosciusko Heritage. The Conservation Significance of Kosciusko National Park*. 1st ed. Sydney: NPWS.

Goulding M and K Buckley 2002 Aboriginal community directions for heritage management in the Australian Alps. Canberra: Report to the AALC

Grinbergs A 1993a A study of land routes of human movement in East Gippsland. Canberra: Report for the Australian Heritage Commission.

Grinbergs, A 1993b The myth hunters: investigations towards a revised prehistory. Unpublished BA (Hons) dissertation, Australian National University, Canberra.

Grinbergs A 1997 Perisher Range Sewerage System EIS. Preliminary Indigenous Heritage Assessment. Report by NPWS to Department of Public Works.

Grinbergs A 2003 Pinch River Camping and Picnic area. Aboriginal heritage assessment and management recommendations, Jindabyne: NPWS.

Grinbergs A 2005 Bushfire impacts upon Aboriginal sites. Kosciuszko National Park, Jindabyne: Report to DEC.

Grinbergs A 2008 Preliminary Aboriginal Cultural Heritage Assessment. Proposed Thredbo to Bullocks Flat Multi-use Track. Report to NPWS.

Helms R 1895. Anthropological notes. *Proceedings of the Linnean Society of New South Wales Series* 2(20): 387–407.

Hiscock P 1985 The Need for a Taphonomic Perspective in Stone Artefact Analysis. Anthropology and Sociology, University of Queensland.

Holth T and Barnaby J 1980 *Cattlemen of the High Country*. Australia: Rigby Publishers Ltd.

Howard P 2016 Artefact Disturbance in the New England Tablelands: Elucidating the Factors Harming Archaeological Sites, s.l.: Master of Professional Studies: Aboriginal Studies. University of New England.

Howitt A W 1904 1996 *The Native Tribes of South East Australia*. London: Macmillan & Co.

Independent Scientific Committee (ISC) 2004 An assessment of the values of Kosciuszko National Park. Interim report. Sydney: NSW Government.

International Council on Monuments and Sites (ICOMOS) International Symposium 2004.

International Council on Monuments and Sites (ICOMOS) 1999 Burra Charter: The Australian ICOMOS Charter for the conservation of places of cultural significance. Australia ICOMOS.

International Council on Monuments and Sites (ICOMOS) 2017 Practise Note on Intangible cultural heritage and place.

Jardine W 1901 Customs of the Currak-da-bidgee tribe, New South Wales. *Science of Man*, 4(3): 53–54.

Johnson I 1989 MINARK: a database for archaeologists. In: J. Flood, I. Johnson & S. Sullivan (eds) *Sites and Bytes. Recording Aboriginal places in Australia*. Special Australian Heritage Publication Series No. 8. Canberra: AGPS, pp. 295–302.

Johnson I 1992 Kosciusko National Park Baseline Heritage Study (Aboriginal sites), Sydney: NPWS.

Kabaila P (n.d.) Pathways: the movement of people in the Australian Alps.

Kabaila P 2005 High country footprints: Aboriginal pathways and movement in the high country of south eastern Australia. Recognising the ancient paths beside modern highways. Pirion Publishing Canberra, ACT.

Kammaing J 1992 Aboriginal settlement and prehistory of the Snowy Mountains. In: B. Scougall (ed) *Cultural Heritage of the Australian Alps, Proceedings of a symposium, Jindabyne, 16–October 1991*. Australian Alps Liaison Committee, Canberra: pp 101–124.

Kammaing J, Paton R, MacFarlane I 1989. Archaeological investigations in the Thredbo Valley, Snowy Mountains. Report to Faraba PL.

Kinhill Pty Ltd 1989 Perisher Range Resorts Village Master Plan and Environmental Impact Statement. Report to NSPW.

Knight T 2010 Kiandra Heritage Precinct Aboriginal Cultural Heritage Study; A report to the NSW NPWS, Tumut.

Leader-Elliott L, Maltby R and Burke H 2004 Understanding Cultural Landscapes Flinders Institute for Research in the Humanities, available at http://fhrc.flinders.edu.au/research_groups/cult_landscapes/definition.html

Lennon J L 003 The cultural significance of Australian alpine areas. *Historic Environment*, 17(2): 14–17.

Mathews R H 1904 'Vocabulary of the Ngarrugu Tribe'. *Journal of the Royal Anthropological Institute*, 34.

McConnell A, K Buckley and S Wickam 2002a Aboriginal heritage sensitivity zoning, Gippsland and East Gippsland Regions. Vol. 3, Aboriginal heritage management in Victorian forests. Report to the Department of Natural Resources and Environment. Victorian Government, Melbourne.

McConnell A, K Buckley and S Wickam 2002b Aboriginal heritage sensitivity zoning, Central Highlands Region. Vol. 2, Aboriginal heritage management in Victorian forests. Report to the Department of Natural Resources and Environment. Victorian Government, Melbourne.

Mitchell P 2015 Horse Nations: the world-wide impact of the horse on Indigenous Societies post-1492. Oxford University Press.

Mulvaney D J 1976 The chain of connection. In N Peterson (ed.) *Tribes and Boundaries in Australia*. Australian Institute of Aboriginal Studies, Canberra.

Mulvaney D 1992 The Alpine cultural heritage in perspective. In B Scougall (ed.) *Cultural Heritage of the Australian Alps*. Australian Alps Liaison Committee Canberra.

Mulvaney K and J Kamminga 1999 *Prehistory of Australia*. Sydney: Allen and Unwin.

Navin Officer 1992 Archaeological Survey; Alpine Way, Kosciusko national Park, NSW. Report to NPWS.

Navin Officer Heritage Consultants (NOHC) 1999 Perisher Blue Ski Slope Plan: Selective Archaeological Survey. Report to David Hogg Pty Ltd.

Navin Officer Heritage Consultants (NOHC) 2000 Perisher Range Resorts Area Aboriginal Cultural Heritage Study. Report to Connell Wagner Pty LTD for the NSW NPWS.

Nielsen A E 1991 Trampling the Archaeological Record: An Experimental Study. *American Antiquity*, 56(3): 483–503.

Niemoeller G 2011 Subsurface testing of bridge footings, Thredbo to Bullocks Flat shared use path. Kosciuszko National Park, Jindabyne: Report to NPWS.

Office of Environment and Heritage (OEH) 2012 Guide to completing the AHIMS site recording form, Sydney: Office of Environment and Heritage.

Office of Environment and Heritage (OEH) 2014 Kosciuszko National Park Plan of Management. Sydney NSW.

Office of Environment and Heritage (OEH) 2016 Draft wild horse management plan; Kosciuszko National Park. Sydney, NSW.

Pargeter J 2011 Human and cattle trampling experiments in Malawi to understand macrofracture formation on Stone Age hunting weaponry. *Antiquity*, 85(327).

Pargeter J and Bradfield J 2012 The effects of class I and II sized bovids on macrofracture formation and tool displacement: results of a trampling experiment in a southern African Stone Age context. *Journal of Field Archaeology*, 37: 238–251

Paton R 1985 An archaeological survey of the proposed Alpine Way realignment near Thredbo, NSW. Report to NPWS.

Paton R 1988 An archaeological investigation of the Telecom Thredbo Valley optical fibre cable. Report to David Hogg PL.

Paton R and Hughes P 1984 An Archaeological Survey of the Proposed Blue Cow Ski resort. Part 1: The Entire Resort Area. Report to NPWS.

Payten R F 1949 The festival of the bogong moth: Letter to A S le Soeuf, 15 June 1949. Mitchell Library, Sydney.

Perisher Blue Pty Limited 2002 Perisher Blue Ski Slope Master Plan.

Peterson N in collaboration with J Long (1986). Australian territorial organisation: A band perspective. *Oceania Monographs* 30.

Rose D Bird 1996 Nourishing terrains: Australian Aboriginal views of landscape and wilderness. Canberra, ACT. Australian Heritage Commission.

Sale K 2004 Kosciuszko Aboriginal Heritage Study Kosciuszko National Park, DEC NSW.

Schiffer M B 1983 Towards the identification of formation processes. *American Antiquity*, 48(4): 675–706.

Schoville B 2019 Experimental lithic tool displacement due to long-term animal disturbance. *Archaeological and Anthropological Sciences*, 11: 5879–5891.

Stephenson H 1980 *Cattlemen and huts of the High Plains*. Penguin.

Stockton E D 1973 Shaw's creek shelter: human displacement of artefacts and its significance. *Mankind*, 9: 112–117.

Sutton P 2003 Native Title in Australia. Port Melbourne: Cambridge Press.

Sullivan S and Lennon J 2004 'Cultural Values' in An Assessment of the Values of Kosciuszko National Park by Independent Scientific Committee. NSW National Parks and Wildlife Service.

Theden-Ringl F 2016 Aboriginal presence in the high country: new dates from the Namadgi Ranges in the Australian Capital Territory. *Australian Archaeology*, 82(1): 25-42.

Tindale N 1974 *Aboriginal Tribes of Australia*. Canberra: Australian University Press.

Thredgold J 2017 An Analysis of Lithics at Calperum Station, South Australia, to Examine the Function of Late Holocene Mound Sites along the Lower Murray River, Master of Archaeology Thesis. Adelaide: Flinders University.

Truscott M 2003 Fact or fantasy? Celebrating mountain heritage today. Celebrating mountains: Proceedings of an International Year of Mountains conference. AALC, Canberra.

Truscott M, A Grinbergs, K Buckley and M Pearson 2006. Assessment of the cultural heritage values of the Australian Alps National Parks. Unpublished report, Department of the Environment and Heritage. Canberra: Australian Government.

Truscott M 2000 Intangible values as heritage in Australia, *Historic Environment*, 14(5).

United Nations Educational, Scientific and Cultural Organization (UNESCO) 1996 World Heritage Convention, Operational Guidelines. <http://www.unesco.org/whc/nwhc/pages/doc/main.htm>

Walkington M 1987 An archaeological survey of a 33KV transmission line (No. 2) from Bullocks Flat to Thredbo. Report to Monaro City Council.

Waters K 2004 Aboriginal oral history project, Kosciuszko National Park. Unpublished report to the New South Wales Department of Environment and Conservation.

Wesson S 1994 Australian Alps oral history project: Aboriginal histories. Unpublished report, Canberra: AALC.

Wesson S 2000 An historical atlas of the Aborigines of eastern Victoria and far south-eastern New South Wales. *Monash publications in geography and environmental science* 53. Melbourne; Monash University.

White J P 2006 Potential National Heritage Indigenous values of the Australian Alps: A review of assessment. Unpublished report, Department of the Environment and Heritage. Canberra: Australian Government.

Young M 2005 *The Aboriginal People of the Monaro: A Documentary History*. Sydney: Government.

Young M, with E Mundy and D Mundy 2000. *The Aboriginal People of the Monaro*. Sydney: NSW Government.

Appendix 1 Project information agreement

INFORMATION AGREEMENT

Aboriginal input – Draft Kosciuszko NP Wild Horse Heritage Management Plan

PURPOSE FOR COLLECTING THE INFORMATION: In accordance with the Kosciuszko Wild Horse Heritage Act 2018, National Parks and Wildlife Service (NPWS) is compiling a new draft wild horse heritage management plan for Kosciuszko National Park. The Act requires that the plan identify the heritage value of wild horse populations in parts of the park and set out how that heritage value will be protected while ensuring environmental values of the park are also maintained. The new draft plan is expected to be completed in the second half of 2020. The draft plan will be compiled with advice from a statutory Kosciuszko Wild Horse Community Advisory Panel (CAP) and non-statutory Scientific Advisory Panel (SAP). The Minister for Energy and Environment has the delegation to adopt a new plan.

NPWS have contracted anthropologist Susan Dale Donaldson to facilitate Aboriginal input into the management of wild horses in Kosciuszko National Park to inform the new draft plan. In particular, the project aims to 1/ establish the current awareness of wild horse management and their impacts; 2/ record community views on the value of wild horses in the park and any impacts of wild horses on Aboriginal cultural heritage; and 3/ record opinions on the ongoing management of wild horses in the park. This will be achieved by small focus group and one on one interviews via the telephone/computer or face-to-face.

USE OF INFORMATION COLLECTED: A report will be prepared which articulates the value of wild horses in the park to Aboriginal people, any perceived impacts of wild horses on Aboriginal cultural heritage values, and the implications for management in accordance with the three objectives noted above. The report will contain the written transcription of the interviews and an analysis of the outcomes of those interviews and will be submitted to NPWS. The report will be considered by NPWS when drafting the new wild horse heritage management plan for Kosciuszko National Park. The report will also be supplied to the Minister for Energy and Environment as a supporting document to the new draft plan.

PUBLIC / CONFIDENTIAL INFORMATION: Information will be treated in accordance with instructions received by Aboriginal informants. Information described as confidential [culturally sensitive] will not be detailed in the publicly available report. Confidential information can be lodged as a restricted AHIMS report, as per instructions from Aboriginal informants.

COPYRIGHT: Information collected for this assessment remains the property of the Aboriginal informants and the author. Without written permission from individual informants and the author information may not be used for purposes other than those outlined above.

ABORIGINAL INFORMANT

INFORMATION COLLECTOR:

Name:

Name:

Contact:

Contact:

NPWS CONTACT: NPWS Kosciuszko Wild Horse Team. Ph 02 6947 7000

INFORMANT INSTRUCTIONS

THE INFORMATION WILL BE RECORDED USING [circle]:

Audio

camera

video

written

APPROVAL FOR FUTURE USES OF THE INFORMATION [circle]:

A report to NPWS / Minister for Energy and Environment

YES / NO

A publicly available report

YES / NO

Provided to relevant LALCS / RAPS / LGA / MOU

YES / NO

RESTRICTIONS ON ACCESS TO THE INFORMATION [describe]:

Any restrictions on the AHIMS in regards to access to site details?

SIGNATURES

Signature of information collector:

Date:

Signature of Aboriginal informant:

Date:

NEXT OF KIN: Who should be contacted regarding your information if you are no longer able/living?

Name:

Contact:

Appendix 2 Project interview questions/topics guide

NAME OF INTERVIEWEE:

CONTACT DETAILS:

INTERVIEW TIME & DATE:

INTERVIEW LOCATION:

BACKGROUND

What is your ancestral / tribal / family connection to KNP? Where did you grow up?

Have you ever been to KNP? What places did you visit? When?

AWARENESS OF WILD HORSE MANAGEMENT

What is your understanding of wild horses? Describe.

Have you ever seen wild horses in KNP? Across the region?

If yes, where do you normally see horses?

when and how often do you see horses?

how many do you normally see?

did you noticed the numbers of horses changing at certain places or over time?

do you think it matters how many horses there are in the park or in certain areas of the park?

Other than your personal experience being on country seeing wild horses, do you get other information about KNP and wild horses? What source [eg newspaper, TV, Facebook]? How often?

Do you know anything about how wild horses are being managed in KNP? Detail.

THE VALUE OF WILD HORSES TO YOU AND YOUR FAMILY

Are wild horses important to you and your family? For instance, do you view them as significant, you don't think about them much at all, you dislike them?

If they are important, tell me:

When did you first learnt about wild horses?

Why are they important and has the level of importance changed for you over time?

Are there any places linked to your stories about wild horses [in KNP]?

Do you maintain these connections / values? If yes, what things do you do? Why?

How do you feel about wild horses being in the sub-alpine and alpine landscape? In KNP?

What do you think about how wild horses look in the sub-alpine and alpine landscape? In KNP?

Do you consider wild horses' part of your social / family network? For instance, do you have a connection with a particular wild horse, a particular group of horses or to a particular place associated with wild horses?

Do you and or your family use certain names when talking about wild horses?

Have you ever given a particular horse a name?

Have you or your ancestors ever had young wild horses as pets?

Do you know what your ancestors did with dead horses?

Have you ever heard if horses were used by Aboriginal people as a source of food / use of horse hair / leather / use of faeces / mode of travel / trading?

Why do you think wild horses are not important to some Aboriginal people?

If they are not important, tell me:

Why aren't they important? Has this view changed over time?

How do you feel about wild horses being in the alpine and sub-alpine landscape? In KNP?

What do you think about how wild horses look in the alpine and sub-alpine landscape? In KNP?

Do you and or your family use certain names when talking about wild horses?

Do you know what your ancestors did with dead horses?

Have you ever heard if horses were used by Aboriginal people as a source of food / use of horse hair / leather / use of faeces?

Why do you think wild horses are important to some Aboriginal people?

What do you know about the past, the history of wild horses in the alpine and sub-alpine landscape in and around KNP? Have you ever heard stories about when wild horses first arrived to the region?

Did you or your ancestors have anything to do with horses throughout your / their life? For instance, historical associations associated with the pastoral industry, tracking, brumby running, transportation, stealing horses, riding, feeding, trapping, killing or being killed, drawing? Where? When? Stories?

Can you explain the difference, if any, between Aboriginal people's connection with wild horses compared with non-indigenous societies connection?

Do you know of any European families who would know about Aboriginal people's historical association with wild horses in the region?

THE IMPACTS OF WILD HORSES TO ABORIGINAL CULTURAL HERITAGE

Why is KNP important to you? Think about any story places, travelling routes, ceremonial grounds, hunting grounds, places where ancestral spirits reside, archaeological sites, named places, tribal boundaries, shared country / meeting places, recreation places, old camping places, food, medicine, water and other natural resources such as grasses, totem species, places associated with life and death, connections across the landscape, teaching places, places associated with historical events, how you feel when you see KNP from afar or when you are in it, and how the place might bring people together?

Do wild horses cause any problems to your country? For instance, are there certain cultural areas or natural features in KNP that are being damaged by wild horses?

If yes, what sort of problems do they cause? How do they cause this damage? Where?

Has the increase / decrease in horse numbers effected your country?

Do wild horses cause problems to any culturally important animals, plants, birds and insects in KNP?

If yes, what sort of problems do they cause? How do they cause this damage? Where?

How does it make you feel when you see wild horse in KNP? Good, bad, don't care?

Do wild horses in KNP effect how you and your family access and enjoy your country, and how you share your country with others? If yes, how?

Do wild horses in KNP have any impact on the spiritual values embedded in the landscape? If yes, how?

Do wild horses in KNP have any impact to archaeological sites? If yes, how? Where?

ABORIGINAL PEOPLE'S OPINIONS ON THE ONGOING MANAGEMENT OF WILD HORSES

Do you know how other Aboriginal groups across Australia are managing introduced animals on their country [such as horses, camels, pigs, goats, buffalos, cane toads]?

Are there particular ways you or your family look after your country? Do you think these ways could be applied to the management of wild horses in KNP, generally and in relation to important cultural sites?

Do you know how Aboriginal people are currently involved in the management of KNP?

Do you have any thoughts on how Aboriginal people could become involved in managing wild horses in KNP?

Is there anything NPWS could do better in relation to managing and acknowledging Aboriginal association with wild horses in KNP?

Is there anything NPWS could do better in relation to managing the impact wild horses are having on Aboriginal sites in KNP?

Different people and groups hold differing views on the value and management of wild horses in KNP. How do you think NPWS should manage these broad ranging views?

How do you normally get information about things going on in your community / town / region?

How can NPWS keep the Aboriginal community informed about the management of wild horses in KNP?

How should NPWS engage with the Aboriginal community about the management of wild horses in KNP?

Appendix 3 Archaeological site categories

Site features	Abbreviation	Description
<p>Aboriginal Ceremony and Dreaming</p> <p>Note: This is not Aboriginal object and therefore not included in the legislative process.</p>	ACD	Previously referred to as mythological sites these are spiritual/story places where no physical evidence of previous use of the place may occur, e.g. natural unmodified landscape features, ceremonial or spiritual areas, men's/women's sites, dreaming (creation) tracks, marriage places etc.
<p>Aboriginal resource and gathering</p> <p>Notes:</p> <p>1. This is not Aboriginal object and therefore not included in the legislative process.</p> <p>2. Not to be used for fish trap, shell or stone quarry.</p>	ARG	Related to everyday activities such as food gathering, hunting, or collection and manufacture of materials and goods for use or trade.
<p>Art*</p>	ART	Art is found in shelters, overhangs and across rock formations. Techniques include painting, drawing, scratching, carving engraving, pitting, conjoining, abrading and the use of a range of binding agents and the use of natural pigments obtained from clays, charcoal and plants.
<p>Artefacts*</p>	AFT	Objects such as stone tools, and associated flaked material, spears, manuports, grindstones, discarded stone flakes, modified glass or shell demonstrating evidence of use of the area by Aboriginal people.
<p>Burials</p>	BUR	A traditional or contemporary (post-contact) burial of an Aboriginal person, which may occur outside designated cemeteries and may not be marked, e.g. in caves, marked by stone cairns, in sand areas, along creek banks etc.
<p>Ceremonial ring</p> <p>Note: Does not include stone arrangements.</p>	CMR	Raised earth ring(s) associated with ceremony.
<p>Conflict</p> <p>Note: This is not Aboriginal object and therefore not included in the legislative process.</p>	CFT	Previously referred to as massacre sites where confrontations occurred between (1) Aboriginal and non-Aboriginal people, or (2) between different Aboriginal groups.
<p>Earth mound</p>	ETM	A mounded deposit of round to oval shape containing baked clay lumps, ash, charcoal and, usually, black or dark grey sediment. The deposit may be compacted or loose and ashy. Mounds may contain various economic remains such as mussel shell and bone as well as stone

		artefacts. Occasionally they contain burials.
Site features Abbreviation Description Fish trap	FSH	A modified area on watercourses where fish were trapped for short-term storage and gathering.
Grinding grooves*	GDG	A groove in a rock surface resulting from manufacture of stone tools such as ground edge hatchets and spears, may also include rounded depressions resulting from grinding of seeds and grains.
Habitation structure Note: Structures built for Aboriginal people by non-Aboriginal people are non-Aboriginal objects and therefore not included in the legislative process.	HAB	Structures constructed by Aboriginal people for short- or long-term shelter. More temporary structures are commonly preserved away from the NSW coastline, may include historic camps of contemporary significance. Smaller structures may make use of natural materials such as branches, logs and bark sheets or manufactured materials such as corrugated iron to form shelters. Archaeological remains of a former structure such as chimney/fireplace, raised earth building platform, excavated pits, rubble mounds etc.
Hearth	HTH	Cultural deposit sometimes marked by hearth stones, usually also contains charcoal and may also contain heat treated stone fragments.
Modified tree*	TRE	Trees which show the marks of modification as a result of cutting of bark from the trunk for use in the production of shields, canoes, boomerangs, burials shrouds, for medicinal purposes, foot holds etc, or alternately intentional carving of the heartwood of the tree to form a permanent marker to indicate ceremonial use/significance of a nearby area, again these carvings may also act as territorial or burial markers.
Non-human bone and organic material	BOM	Objects which can be found within cultural deposits as components of an Aboriginal site such as fish or mammal bones, ochres, cached objects which may otherwise have broken down such as resin, twine, dilly bags, nets etc.
Ochre quarry	OCQ	A source of ochre used for ceremonial occasions, burials, trade and artwork.
Potential archaeological deposit Note: This is not Aboriginal object and therefore not included in the legislative process unless accompanied by an object.	PAD	An area where Aboriginal objects may occur below the ground surface.

Shell*	SHL	An accumulation or deposit of shellfish from beach, estuarine, lacustrine or riverine species resulting from Aboriginal gathering and consumption. Usually found in deposits previously referred to as shell middens. Must be found in association with other objects like stone tools, fish bones, charcoal, fireplaces/hearths, and burials. Will vary greatly in size and components.
Stone arrangement	STA	Human produced arrangements of stone usually associated with ceremonial activities, or used as markers for territorial limits or to mark/protect burials.
Stone quarry	STQ	Usually a source of good quality stone which is quarried and used for the production of stone tools.
Waterhole Note: This is not Aboriginal object and therefore not included in the legislative process.	WTR	A source of fresh water for Aboriginal groups which may have traditional ceremonial or dreaming significance and/or may also be used to the present day as a rich resource gathering area (e.g. waterbirds, eels, clays, reeds etc).

