Travelling Stock Routes and Reserves (TSRs) and links to previous Indigenous pathways.

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The name Wiradjuri is spelled in two ways in these Proceedings:

1. 'Wiradyuri' is the preferred spelling by the Bathurst Elders.
2. 'Wiradjuri' is the spelling used by most Wiradjuri people living outside of Bathurst.

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Travelling Stock Routes and Reserves (TSRs) and links to previous Indigenous pathways

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Abstract

Travelling Stock Routes (TSRs) are networks of grazing routes and reserves situated throughout much of south-eastern Australia and thought to have originated from the informal tracks of early European explorers, pastoralists and settlers. However, the historical development of TSRs has been poorly documented, and mostly confined to the classic pastoral account. An alternative perspective is that many TSRs may have originated from previous Indigenous traditional pathways, which are known to have existed before European settlement. Adoption of Indigenous pathways into the present-day stock route system has most likely occurred by (1) 'passing on' of knowledge of pathways by Indigenous guides and trackers; (2) observations of physical evidence of pathways by early Europeans and their subsequent adoption; and (3) shared development as a result of Indigenous peoples working in the pastoral industry. These findings highlight the potentially significant cultural heritage values of components of the NSW TSR network.

Introduction

Often referred to as the 'long paddock', Travelling Stock Routes and Reserves (TSRs) form a network of grazing routes and paddocks that extends across much of south-eastern Australia, and which are used by drovers and pastoralists to move stock from one place to another. Travelling Stock Routes and Reserves are considered to be an integral component of the rural landscapes of Australia, immortalised in the poetry of A.B. 'Banjo' Paterson, Henry Lawson and others. General literature would suggest that these routes originated during the pastoral expansion and overlanding of the late 1830s and early 1840s, from explorers tracks, and informal stock tracks used by pastoralists and settlers. By the late 1870s, these tracks became a formal network of more readily defined and proclaimed routes and roads (e.g. McKnight, 1977; O'Connor, 2004; Spooner, 2005).

More than just a grazing paddock, TSRs provide important protection for remnant native vegetation in many regions (e.g. Breckwoldt, 1990; Spooner and Lunt, 2004), and refuge for threatened plant species (Ramsay, 2007). TSRs are also critically significant for the conservation of fauna species, as they provide a continuous network of habitat corridors which allows for movement for wildlife across the landscape (e.g. Cale, 1990; Freudenberger and Drew, 2001). As a result, many TSRs possess important conservation values (e.g. NSW NPA, 1991; Spooner and Smallbone, 2009; Smiles et al., 2011; O'Loughlin et al., 2017). The cultural heritage values of TSRs are also gaining new attention in management decisions. Though much has been written on TSRs' grazing values (Hibberd, 1978; John et al., 2000) as well as linkages to droving life and the squatting era (e.g. Buxton, 1967), there are surprisingly few accounts on their historical development (But see McKnight, 1977; Spooner, 2005; Cameron and Spooner, 2010; Spooner et al., 2010).

Recently, authors such as Harrison (2004) and Kerwin (2006) have discussed how the origins of many TSRs could be much more complex than often portrayed in historical narratives, and have developed from traditional pathways of Indigenous peoples. As such pathways are an integral part of Indigenous land management and cultures, then the age of certain TSRs could be 40,000 –120,000 years (Flood, 2006; Kerwin, 2006), or, have always been here (Yalmambirra, 2015). This assertion provides a fresh perspective to the shared values of this ubiquitous landscape element. This paper was material presented at the Biodiversity Dreaming Conference, Bathurst, November 10–11, 2015, with a focus on TSRs in New South Wales.

Background: What did traditional indigenous pathways look like?

It is well documented that Indigenous traditional pathways existed in Australia prior to European settlement (e.g. Roth, 1897; Johnston, 1941; Flood, 1983; Steele, 1983; McBryde, 1997; Blair, 2000; Kirwin 2006) and were regularly utilised for trade, travel, ceremonial and spiritual purposes (Massola, 1973; Rose, 1996; Nicholson, 2007). They often extended for hundreds of kilometres, and formed vital links to water and food sources, and provided avenues of access to various parts of the country. In a European sense, the term pathway evokes an image of a managed, signposted road of some kind. For Indigenous peoples, a 'pathway' had both tangible and intangible qualities, and therefore, references in the literature to such are often ambiguous. But this network did exist before European settlement, and as will be discussed, adopted into contemporary road and TSR networks.

For Indigenous peoples, the tangible aspects of pathways (i.e. physical signs of tracks) were intertwined with their spiritual and cultural beliefs, where ancestral beings created the land and its features in the time known as 'Dreamtime', establishing law (lore) for interaction between people and the environment (Blair, 2000; Watson, 2000) (Figure 1). Knowledge of pathways was passed on from one generation to the next, by song and ceremonies, as Indigenous peoples travelled across the country (Flood, 1983). As such, pathways represent a convergence of the human form and the Dreamtime (Figure 1). For this paper, the term 'traditional pathway' will be used to describe Dreaming tracks (McCarthy, 1939; Memmott and Long, 2002), Song Lines (Donovan and Wall, 2004), Trade Routes, (Horton, 1994; Mulvaney, 2002; McBryde, 1997), and Indigenous Pathways (Blair, 2000).

Figure 1 'Dreamtime map', attributed to 'Wiradjuri'.

Source: Doongal Aboriginal Art (2016). Used with permission, 12th May 2019

Traditional pathways are a physical expression of the way. Indigenous peoples moved around the landscape. This movement may have involved a variety of motivations: social, economic, ceremonial (spiritual); and is closely linked with the construction of their cultural landscape (i.e. dreaming track, song lines, creation sites: e.g. Roth, 1897; Williams and Hunn, 1982; Pickering, 1994). Indigenous peoples used traditional pathways to

exchange goods, gifts and information on an inter-clan basis (Broome, 2001). As manufacturing and handcrafts were often the work of specialists, each locality tended to specialise in making certain objects, forming the basis of trade (Blainey, 1982). Goods such as food, stones, native tobacco, ochres, tools, ceremonial items and other resources that were not normally available within one area, were then obtained via trade routes from another (e.g. McCarthy, 1939; Johnston, 1941; Micha, 1959; Jones, 1984; Reynolds, 1990*a*).

Indigenous peoples did map the landscape and named formations, water and food resources within their regions (Turnbull, 1989). However, the landscape they observed did not consist merely of rocks, trees and waterholes, but also of places which the great ancestors had created and lived within (Broome, 2001). It was a symbolic and spiritual world. Throughout the generations, Indigenous peoples had built 'mind-maps', the web of their environments, and with this a great capacity for remembering (Baker, 1993; McBryde, 2000). This was, according to Baker, (1993; 1997) a true compass; a pointer to whichever direction or place they wished to go. These pathways were also used to gather for ceremonial meetings, which took place when seasonal conditions were suitable, and food sources were available (Horton, 1994; Donovan and Wall, 2004). As a result, Indigenous peoples often followed well-known and often well-signposted routes, which generally ran along watercourses and between water sources. A valuable resource soon 'discovered' by some early Europeans, with the knowledge and know-how to do so.

Physical markings were often used to mark Indigenous pathways, to show followers (primarily other Indigenous clans) which direction to travel. Methods for marking or identifying pathways include the use of shield markings (Cowan, 1992); stone and wood tjuringas (Cowan, 1992; Kerwin, 2006), carved trees along the route (Mulvaney, 1989); and use of wooden message sticks – the latter acting as a passport to travel across country (Roth, 1897; Coghill et al., 1997). Principal objects of use were wood and stone toas - colourful objects used to indicate direction and route to follow (Hercus, 1987, cited in Kerwin, 2006). Nicholson (2007) suggests that maps were also inscribed on toas; wooden implements used as directional markers or signposts about territory (McConnell, 1976). These markers were driven into the ground at various campsites and were accompanied by signs on the ground to notify people of their presence (Tolcher, 2003). Bora grounds, consisting of a large and small ring with well-defined paths connecting them, existed at intersections of pathways. These could be an arrangement of stone or a circle of earth rings and could be as large as 60 metres in width (Steele, 1983).

In most cases, however, pathways appear to have existed as easily distinguished foot tracks, with few other observable markings to passing Europeans. In general, easily observed campsites occurred along traditional pathways about every eight kilometres: the average distance covered in a day when hunting or travelling with a family group. The 'width' of the traditional pathways varied with group size. For example, in the Australian Alps, where numerous pathways existed, Indigenous peoples would travel in small groups and pathways were often narrow and difficult to locate without Indigenous knowledge (NSW DECC, 2003). In contrast, when travelling along a river, large clans of Indigenous peoples customarily followed the same pathways, thus creating wider paths clear of obstacles (Peterson and Long, 1986; Tolcher, 2003). These pathways would have been easily recognised by any new travellers into Country (Figure 2).

It is thought that most pathways had varied little for thousands of years, as evidenced by large amounts of discarded bone, shell and broken tools recorded along with them (McCarthy, 1939).

Many pathways followed major rivers, floodplains, lakes and marshes (Koetigg, 1985) as a permanent water source vital for groups of people attending ceremonial activities; for general social life; and as a focal point for trade (Ah Chee, 2004). But the travels of Indigenous peoples were not necessarily restricted by a lack of water. According to Nicholson (2007), traditional pathways often followed the easiest and most accessible routes of the landscape, such as open wooded areas, and ridgelines rather than the steep, choked gullies. Generally, pathways followed the natural contours of the landscape, which were free of obstacles (NSW DECC, 2003). Thus, traditional pathways rarely formed a straight line (Figure 2).

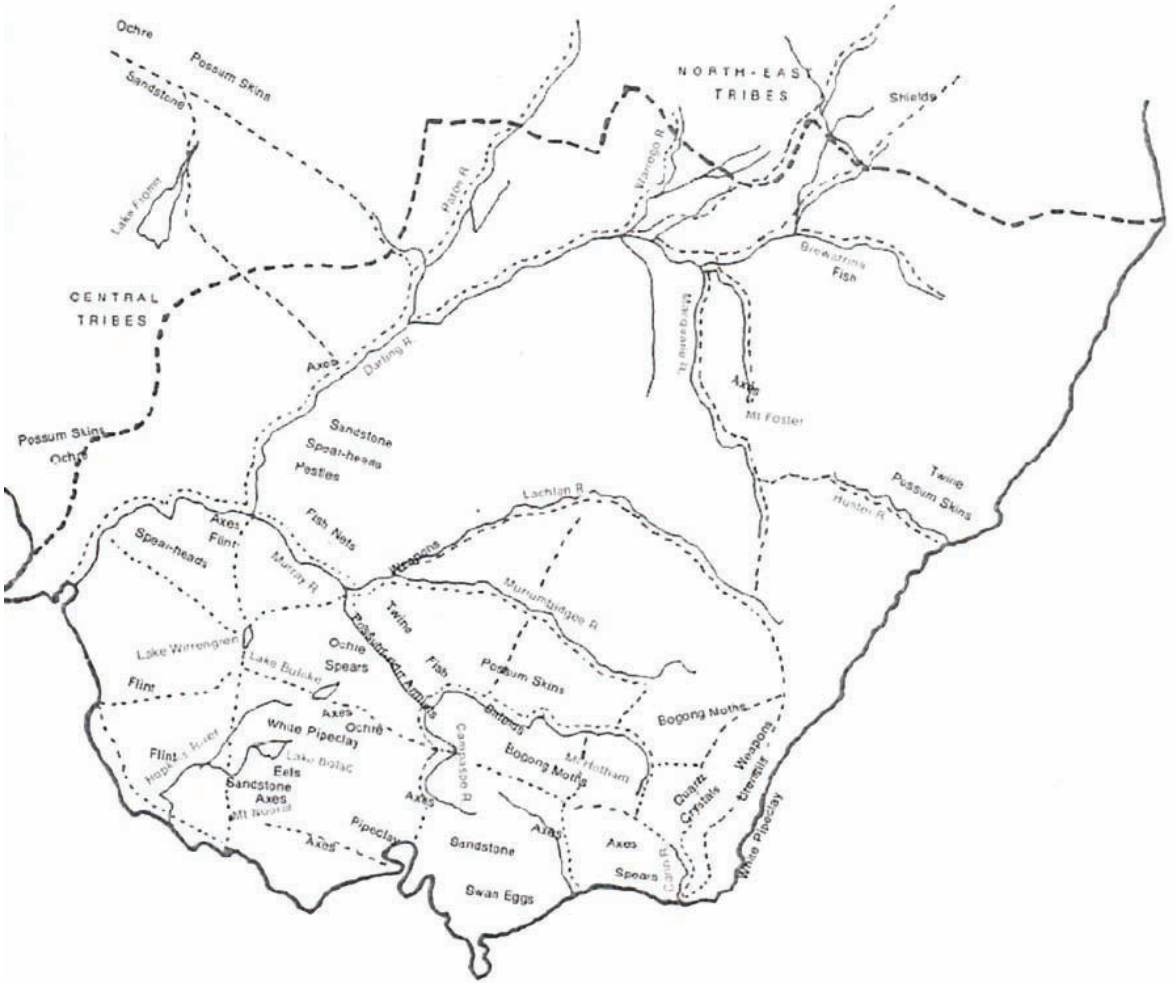

Figure 2 A map of south-eastern Australia, showing the location of important Indigenous trading resources and known traditional pathways. Such pathways were used to great advantage by early European travellers.

Source: Adapted from Massola 1971, p. 71

Indigenous peoples generally took the easiest route, rather than travelling in a straight line, because this approach uses less energy (Tolcher, 2003). Topography was a key determinant of direction, but other studies have stated that route direction was also influenced by the water availability (e.g. tributaries, or mallee root water), food, or other environmental conditions (McCarthy, 1939; Johnston, 1941; Berndt and Berndt, 1996; Noble and Kimber, 1997). However, as the spiritual and social lives of Indigenous peoples were intertwined with the physical landscape, evidence suggests several routes developed more for these reasons (Myers, 1982; Peterson and Long, 1986; Pickering, 1994; McBryde, 2000).

The identification of traditional pathways by explorers and early pastoralists

So what tangible evidence existed of traditional pathways for early European travellers to recognise and utilise? There are many accounts by early expedition leaders which describe how travelling parties quickly grew accustomed to finding the foot tracks of Indigenous peoples and following these to water and food sources (Reynolds, 1990*b*). In early explorer journals, however, often these accounts are no more than passing remarks. For many English explorers of the time, pathways of the 'uncivilised natives' were barely worth noting. More accurately, acknowledgment of such would diminish the exploits of the journey, where stories of heroic discovery were critical for future promotion and rewards. John Oxley, then surveyor-general of NSW, provides a clear record of his observations of existing Indigenous pathways and their value:

> 'The tracks and impressions made by the feet of the natives were certainly made when the ground was very soft and marshy' (03 August 1817; Oxley, 1820),
>
> '...the grass had been burnt, and the marks of the mogo or stone hatchet on the trees, made by the wandering natives of these deserts in search of food, gave us renewed hopes of soon coming to water' (07 August 1817; Oxley, 1820), and
>
> 'Marks of the natives' tomahawks were to us certain signs of approaching water' (13 August 1817; Oxley, 1820).

Oxley's (1820) journal entries describe tracks linking waterholes, as well as their physical nature and markings. Similarly, Hume and Hovell observed a 'native path, bearing impressions of the feet of a considerable number of natives...' (2 November 1824, Hovell and Hume, 1825). Likewise, Sturt (1833) recorded signs of numerous pathways formed by foot-tracks, which he often followed to water-sources as he explored the inland waterway system of NSW. Mitchell's (1838; 1848) journals contain much evidence for the use of pathways and local Indigenous knowledge (as described in more detail by Poynter, 1987; Reynolds, 1990*b*) and others. Mitchell made numerous remarks about the existence of pathways, often following them to water points, having observed footprints imprinted in the soil, or tomahawk cuttings in the trees along the route (see also Reynolds, 1990*b*). Elsewhere, other explorer accounts would make similar observations of 'well-beaten tracks' or 'native pathways' (e.g. Eyre, 1845).

In 1838, the famous stock overlanders Joseph Hawdon and Charles Bonney drove stock from the Goulburn Plains to Adelaide, pioneering some of the first stock routes. They stated that Indigenous pathways:

> 'proved very useful to us, and the paths which they had made in travelling up and down the river afforded an unfailing guide as to the direction we ought to take to cross the great bends it frequently makes' (Kain, 1991, p.73). See also Figure 1.

In moving stock, overlanders such as Hawdon and others would pioneer new routes such as the Port Phillip to Sydney route, which later become a major stock route, and the present Hume Highway. In 1839, Lady Jane Franklin, accompanied by naturalist Dr Charles Hobson and party, travelled this route to Sydney (Parris, 1949; Russell, 2002). Both Hobson and Lady Franklin kept extensive journals of their expedition, providing a fascinating insight into the country's natural environment before European development. Here, Dobson recorded to have observed and followed several 'native tracks' branching from their route (Russell, 2002).

Traditional pathways were marked by a variety of methods (including fire), depending on local environmental attributes. As well established in other literature, Indigenous peoples burnt the country to establish new grass swards to attract and hunt native animals, and it was these grassy swards that caught the eyes of early explorers for grazing purposes (e.g. Grounds, 1983; Andrews, 1991). As some authors have suggested, early explorers soon learnt to recognise that traditional pathways were also maintained by fire (Reynolds, 1990*b*; Nicholson, 2007). Travel corridors through dense forest were often maintained by regular burning that allowed for ease of movement through country (Reynolds, 1990*b*). Evidence suggests that in many localities, early Europeans gained knowledge of previous traditional pathways, either by actual discovery or through guides or trackers passing on knowledge (see below). Pathways which followed the banks of rivers and creeks were often utilised to great advantage during the early European exploration of the country. In turn, many of the tracks of early explorers and pastoralists formed the beginnings of the nation's road and Travelling Stock Route system.

Regional example: stock route development in the high country

Various studies have described that numerous traditional pathways existed in the high country, many of which have formed today's roads and Travelling Stock Routes (e.g. Flood, 1980; Gardner, 1991, 1997, Kabaila, 2005) (Figure 3). Mountains are often the focal point of cultural landscapes and can have spiritual significance to more than one social group (Ardler, 2003). As such, Indigenous peoples often gathered for ceremonies around distinctive high peaks in the Australian Alps, which were connected by an extensive network of traditional pathways (Kabaila, 2005; NSW DECC, 2008). In the case of the Wiradjuri, pathway networks also formed links with people from outside their language areas. An example of this is the annual Bogong Moth (*Agrotis infusa)* feast, which occurred with the participation of other clan groups (Hosking, 1959; Flood, 1980; Tucker, 1985; Gardner, 1991; 1997). During summer months (between October and February), hordes of small moths (called 'Bugong' by the local Indigenous people) would migrate to the high country and 'sleep' in the crevices (Tucker, 1985), providing a feast for the Indigenous peoples.

According to Priestley (1984), traditional pathways in the high country were often well marked or easily sighted, and followed ridgelines or gullies due to the difficult terrain and thick vegetation. For example, there appears to have been two main crossing places of the snowy mountain ranges: the Omeo gap (an old stock route, and now the Omeo highway), and the Kiandra gap (now followed by the Alpine Way). The Omeo Highway was initially a traditional pathway that leads from the Mitta Mitta valley across the High Plains into the Tambo Valley (Priestley, 1984). Both routes were later extensively used as stock routes, as indicated by 1860–80s parish maps (NSW LPI, 2017).

The pastoral development of the Monaro and Omeo grasslands and associated stock routes has been well documented by various authors (e.g. Pepper, 1985). As an example, Andrews (1991) describes how in the 1840s, a man named Stewart Ryrie Jr set out into the Monaro to make a report on the newly developed squatting districts and observed numerous traditional pathways (Andrews, 1991; Scougall, 1992). Later, sections of traditional pathways which Ryrie observed were developed into stock or other travel routes (Blay, 2005). Similarly, A.W Howitt (1876, cited in Scougall, 1992) found Indigenous pathways running along the northern slopes of the Great Divide from Victoria. Howitt stated 'as far as I know, two or three trails...still form the lines of communication for the whites' (Howitt, 1876, cited in Scougall, 1992 p.11).

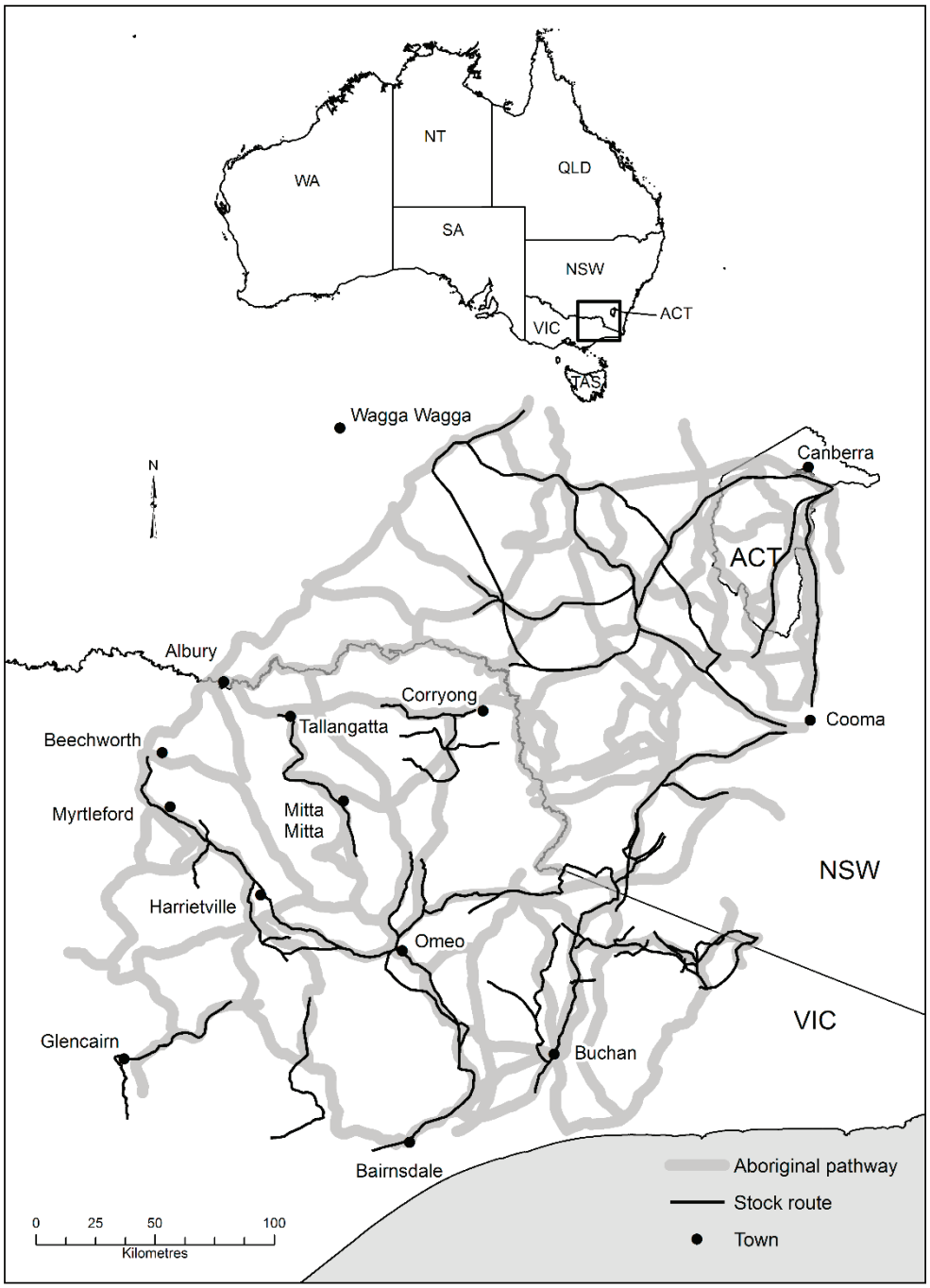

Figure 3 Map of Traditional Indigenous pathways in south-eastern NSW and eastern Victoria

Source: drawn from historical and archaeological information; Kabaila, 2005, p.139), with an overlay of early stock routes, 1866–1872 (Kabaila, 2005, p. 142–143). As shown, there are correlations with pathways and TSRs in some areas, but not others.

Knowledge of traditional pathways was mostly not 'discovered', but handed down to early Europeans. As Gardner (1997, p. 96) states, 'every explorer and squatter of note in the alpine district was assisted by at least one Indigenous guide' to find their way. For example, the Tongio Gap was certainly part of a frequently used traditional pathway to access the upper Tambo River. In 1839, Walter Mitchell was shown the Tongio Gap by a Jaitmathang man

called Matooka. It is also thought that the cattlemen Brown and Wells, who located and developed stock routes to the Bogong High Plains, did so with the assistance of the local Indigenous people (Gardner, 1997). In a famous example, the explorer and pastoralist Angus McMillan used Indigenous guides from the Jaitmathang to traverse the rugged country between Ensay and Bruthen. McMillan recorded that the last section was a 'well-worn traditional pathway*'* (Gardner, 1991, p. 42). In turn, this was one of the earliest stock routes established from traditional pathways in the Omeo region (Flood, 1980; Gardner, 1991).

The importance of Indigenous peoples in assisting the early pastoral development of the Monaro and high country regions was neatly summarised in the Monaro Mercury newspaper (1892, cited in NSW DECC, 2003):

> 'Why, it was the blacks, and nobody else who opened up the country…Who else would have opened it up…They lead him, and you, and everyone else here and there.'

Why there should be a wealth of relevant information for the alpine region, as opposed to a general paucity for regions elsewhere is unclear, but it is most likely due to (1) the richness of resources which supported Indigenous peoples in this area, (2) differences in land management (much of this region is a National Park), and (3) subsequent investment in researching the region's cultural heritage values. Also, due to the rapidity of agricultural development for most other grazing areas of inland NSW, evidence of pathways was probably lost or destroyed before it could be documented.

Transfer of knowledge of Indigenous pathways: the role of Indigenous guides and trackers

As discussed (above), the adoption of Indigenous pathways was not just from the discovery of physical evidence of such, but from knowledge passed on from Indigenous peoples. The physical and spiritual attributes of traditional pathways required Europeans not just to develop an eye for country, but establish meaningful relationships with Indigenous peoples. Indeed, the use of Indigenous knowledge was considered to be critical to the success of early European expeditions into Australia (Reynolds, 1990*b*; Kerwin, 2006). In this way, early 'explorers' and pastoralists were often guided through the country by Indigenous peoples. Where this happened, it was inevitable that a transfer of knowledge took place about vital water, food and other resources, and the pathways used to navigate the landscape (O'Bryan, 2004).

The journals of the NSW surveyor-general Thomas Mitchell, highlight the exchange of navigation and resource information between Indigenous peoples and early European explorers (Poynter, 1987). In his early days, Mitchell learnt from Hamilton Hume, of the importance of acquiring knowledge from Indigenous peoples. Hamilton Hume was fluent in language, and greatly aided Charles Sturt in his journey to the Darling River, and, before that, the development of travel pathways in the Blue Mountains and southern highlands. During an early expedition that discovered Lake George in 1828, Mitchell used an Indigenous guide known as Primbrubna (Baker, 1997). According to Baker (1997; 1998), Primbrubna was a typically hired helper, fluent in English, whom Mitchell first engaged with on a squatter's run. Primbrubna played an important role in Mitchell's journeys by consenting to guide Mitchell through Country in exchange for material rewards. To Mitchell's credit, he was ever willing to learn the traditional names of landscape features and endeavoured to compile as much Indigenous knowledge on this topic as possible (Mitchell, 1838).

In later Mitchell expeditions, an Indigenous guide named 'John Piper' greatly assisted his journeys along major NSW rivers (Poytner, 1987; Baker, 1993; 1998). Like Mitchell, Charles Sturt used another Wiradjuri man, Botheri, to not only guide him along the Macquarie River, but also to lead him to water when this was needed (Sturt, 1833). On one occasion, the party (accompanied by Hume) was assured of water when guided along a 'native path'. They had not proceeded more than a mile when they suddenly found themselves on the banks of the Darling River. Here, traditional pathways were observed (see Figure 1) and utilised on either side of the river; described in his journal as 'well-trodden roads' (03 February 1829; Sturt, 1833).

This transfer of knowledge is a well-practised, most direct form of education for Indigenous peoples (Roth, 1897; Broome, 2001; Edwards, 1998). Knowledge included knowing where water could be located, what plants were good for food or medicines, and what pathways could be walked without interfering with gender or other issues related to law. But guides and trackers also 'kept' specific knowledge to themselves (Myers, 1982). For example, to avoid conflict with other clans when guiding expeditions, guides or trackers would simply by-pass ceremonial or other sacred areas (Rose, 1996). In this way, Indigenous guides would take precautions to ensure that the routes taken did not impinge on neighbouring clan country, and often obtained specific permission from their neighbours before they were allowed to travel through their territory (Myers, 1982; Williams and Hunn, 1982; Tindale and Lindsay, 1963).

Not having appropriate 'knowledge' applicable to one's neighbouring country also meant that some guides and assistants would have resisted any attempts to enter country that did not belong to them (Baker, 1997). In such cases, explorers may well have had to 'release' their trackers or guides, and be forced to use members of a neighbouring clan group (Baker, 1993). Curiously, McLaren and Cooper (1996) use examples of a tracker's lack of knowledge of territory as proof that Aboriginal involvement in early exploration is an 'enduring myth'. Rather, the benefits of Indigenous knowledge were better utilised by those who understood their customs. As Donovan and Wall (2004, p. 80) state:

> 'The most successful explorers were those who realised the value of Aboriginal knowledge of the country. They talked to Aboriginal people and took Aboriginal trackers with them to guide them through unknown and often inhospitable country.'

Adoption of traditional pathways as stock routes

Before the arrival of European explorers, settlers and pastoralists into the country, Indigenous peoples had developed an extensive system of traditional pathways. These pathways may or may not have been observed or followed. More commonly, the use of Indigenous knowledge of pathways and available resources (e.g. water) ensured the success of many expeditions and early pastoral forays into country. In many regions (but not all), they passed on a map of how to travel through country. Indigenous knowledge, combined with often sketchy maps of previous explorers' tracks, were often the main navigation tools for early squatters to access newly explored areas of the country (Roberts, 1935). By guidance, adventure and good-luck, their quest to find and develop fertile grazing lands played a major role in pioneering the TSR system. In turn, passing on of Indigenous knowledge of existing pathways and resources, no doubt occurred, either directly or indirectly, and to various extents, according to the people involved.

Despite a paucity of information, there are documented examples of the adoption of traditional pathways as roads or stock routes (For examples, see NSW DMR, 1950; Morgan, 1956;

Massola, 1973; Campbell, 1977; Harrison, 2004). Because Indigenous peoples and Europeans were confronted with the same physical environment and required similar resources, it is logical that Europeans settlers followed existing traditional pathways, either by observation or by the guidance of a tracker (Anderson, 1994). As described, traditional pathways usually ran from one water resource to the next, and segments were usually not more than a day's walk, often ending in a campsite or ceremonial ground (Massola, 1973). For Indigenous peoples, water was a spiritual power and the essence of life (English, 2002). Likewise, for early Europeans, access to water was critical to their survival, as well as for their horses and transportation of domestic stock. With Indigenous knowledge, they would utilise these 'chain of ponds' as stepping stones into the interior of New South Wales and other states (Blair, 2000, p. 15).

There are obvious congruencies and comparisons to make between the previous traditional pathway and modern-day TSR network; both of which consist of a network of routes connecting major resources – especially water. After settlement commenced, Travelling Stock Routes and Reserves allowed for Indigenous peoples, in either their role as a drover or other worker, to have continuity with their traditional travel lines and ancestral lands (Harrison, 2004). According to Sharp and Tatz (1966), Indigenous peoples were superior in the pastoral industry because of their ability in tracking, their knowledge of the country and their general bushmanship. These skills were of considerable importance when employed in stock work (Kerwin, 2006). For Indigenous peoples, the seasonal nature of station droving allowed them to maintain aspects of their cultural customs, particularly where station travel was combined with ceremonial journeys (McGrath, 1987; NSW DECC, 2003). Therefore, in some regions, Indigenous peoples played an active role in the development of early stock routes.

Conclusions

The history of some TSRs appears to be a shared story of Indigenous and European development. The extent to which individual TSRs are correlated to previous pathways requires further investigation, but recent research in south-eastern Australia (Blay, 2005; Kabaila, 2005), South Australia (McBryde, 1997), south-eastern Queensland (Kerwin, 2006) and other areas of NSW (Harrison, 2004) has demonstrated the emerging story of the shared development of many of our major roads and stock routes, where the true age of many stock routes may be in the order of thousands of years.

However, there are large information gaps in the historical record. In particular, there is a scarcity of information on traditional Indigenous pathways in rural areas of NSW. Suggested factors contributing to this issue are: (1) the rapidity of land settlement and land modification, resulting in much physical evidence being destroyed before it could be recorded; (2) lack of government records from the 19th century documenting any positive exchanges or benefits of Indigenous cultures; (3) further information does exist, but is yet to be unearthed from local history collections; and (4) many Nations or local groups withheld information for any number of reasons.

There are clear issues in attempting to disentangle whether a TSR originated from an existing Indigenous pathway, or whether a TSR simply coincides with a previous pathway (i.e. best place to locate a route regardless of culture). An example of this problem is for routes along a major river – in this case, were Indigenous pathways followed along river-banks, or were the river-banks followed because they are the preferred route for any traveller? If previous Indigenous pathways were unmarked and unrecognisable to Europeans, it could be argued that

some TSR routes have no direct connection to Indigenous pathways. Further research is required to better understand their history, via archaeological field evidence, oral histories with local people, and network spatial analyses (Byrne and Nugent, 2004) (Figure 4).

Figure 4 Recent archaeological evidence of Aboriginal occupation found in the Ulan TSR (for more information, see Murray et al. 2017). Such evidence reveals the potentially rich and shared history of certain TSRs.

Source: Photo courtesy of Kevin Williams.

The TSR network is a continually changing landscape element. Early parish maps clearly show that many segments were added well after first 'contact' with Indigenous peoples (O'Connor, 2004; Spooner, 2005). In the late 1800s, when TSRs were formally gazetted, many were reserved not just for grazing purposes, but as a temporary land control tactic by early squatters (Gammage, 1986; Spooner, 2005). Therefore, many TSRs will not have any connection to previous Indigenous cultures. Nevertheless, re-discovering the shared history of TSRs and potential connections to traditional pathways provides a new and exciting narrative to the story of 'the long paddock', a story which can harness new community interest, connection and investment towards their management for future generations. With grazing, environmental and cultural management issues being high on the agenda for TSR stakeholders, it is important that future decision making includes the values, knowledge and experiences of all peoples concerned.

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