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The Canberry Ranges, Black Hill, Black Mountain, 'the Golden Hill' and beyond

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Abstract. This paper outlines changes across time in valuing and use of the cultural landscape of Black Mountain, with reference to related landscape elements in central Canberra. The primary focus is on the period 1820–1970 to encompass the colonial and Federal phases of settlement. Reference is also made to prior and overlapping settlement by Aboriginal people and their antecedents, and to urban development after 1970. These stories revolve around the value of the area to Aboriginal people and pastoralists for their sense of place and for subsistence, to institutions for research and education, and to increasingly urbanised populations for materials and recreation. The storied landscape of Black Mountain has both shaped and reflected human use of the surrounding area. For centuries it resisted permanent habitation and dramatic change, even while it was being used actively by human populations. Over that time it has been a persistent landscape while many things have happened and changed around it, until the past half century in which urban development decisions redefined and dissected the landscape, irreversibly and with scant regard for the area's non-use values. However, these later and disruptive developments did not extinguish, and may actually have amplified, many of the values we now ascribe to Black Mountain.

1. Introduction: frames of reference

This paper goes beyond a conventional 'what happened when' history, beyond sharp distinctions between 'natural' and 'cultural' landscapes, beyond the boundaries of what we now call Black Mountain Nature Reserve, and beyond the timeframe for which it was originally commissioned (1820–1970). Some clarifications are provided below of its chosen approach and scope.

Approach to history: an ecological approach to history emphasises interconnectedness and goes beyond a chronology of events (what happened next) to patterns and systems through time (what shaped the things that happened). Part of this is recognising that the nature of an environment has shaped its past use, in addition to that use shaping the nature of an environment.

Uses and values: the uses of an environment by humans (choices we make) reflect the values placed on the environment by humans (another set of choices we make), e.g. how much we will tolerate in compromise or destruction of an environment. In turn, valuing of an environment reflects those uses to which it is put, e.g. an increase in value resulting from discovery of a useful commodity. This might include also new awareness and activation when such a discovery is seen to threaten other values that were previously unrecognised or taken for granted, especially non-use values. In such cases there may be 'winners and losers' as a result of these human choices, because of the different levels of power held by different players in society. This is a key part of our history also.

Time frame: the focus here is on 19th and 20th century uses and values, and in particular the period from 1820 to 1970, from the first recorded arrival of Europeans in the area to formal reserve declaration of what we now call Black Mountain. Because time does not simply start or stop with an event, and to explore how an environment reflects its geological and biophysical history, I look back over 'deep time', although in less detail. In the same manner I look at how uses and values up to 1970 have pointed to uses and values in the succeeding half a century, up to our own vantage point in time.

Geographic frame: the area that is now Black Mountain Nature Reserve is an artefact of decisions made primarily in the last half century. Prior to that, it was one element of a contiguous landscape that extended over a much larger area — what we might term 'Greater Black Mountain'. An

ecological approach demands attention to these broader biophysical and cultural linkages, and attention to uses and values in the broader area that have affected what is a nature reserve today.

2. Short story

Black Mountain has long been a high point in the landscape, in relation to the Molonglo floodplain of central Canberra, to other high points, and to places in between — a physical reality with cultural dimensions. For Aboriginal people and their antecedents, across more than a thousand generations, it has served, and continues to serve, as a landmark for navigation; a vantage point to appreciate patterns and movement in the landscape; a nourishing terrain providing water, food, fibre and shelter; and a storied landscape where places and pathways offer history, meaning and lore.

A few of these values pertain also to the original colonial settlers, who had similar subsistence needs, albeit with different ways of meeting them, but for whom there is no evident spiritual connection to the place. For the first explorers and colonial settlers, the sparsely treed grasslands of the Limestone Plains were the valued landscape to support extensive livestock grazing. Adjacent timbered hills such as Black Mountain could be appreciated as a source of materials for construction and fuel, and they could be feared as 'dark woods' — a source of fire or pest animals, as a place where one might get lost, or as a hiding place for undesirable people. With no reliable water, the hills might be visited but would stay essentially uninhabited, except at the edges (notwithstanding rumours of an old bushranger's cave).

So for the first decades of colonial settlement after 1820, not much would have changed in the physical Black Mountain landscape. Its forests continued to contrast with the open grasslands of the floodplain and the connecting valleys of the area, as a higher and wilder place. When Canberra was chosen as the site for the Federal Capital, waves of surveyors and geologists began to fill in blanks on the map that had been largely undifferentiated bushland, and they named its high ground, valleys and creek lines. When the time came to design the city, Walter Burley Griffin saw Black Mountain as a key high point forming one end of his Water Axis, contrasting with a low point on the Molonglo floodplain at the opposite pole. He anticipated that its rock and vegetation would contrast with water on its southern side, in West Lake. Griffin was most keen that Black Mountain be retained in its 'primeval luxuriance'.

Later planners were to see it as an unfortunate obstacle to be overcome, seeming to appraise it in terms of 'nuisance value', or as a place that had to yield to modernism and technological development. Perhaps all the more strongly due to irreversible development decisions, today we see that it is valued highly for its contrast to the urban environment. Such contrasts are both visual (e.g. wild vs. civilised, disorderly vs. orderly, generally expressed in terms of forest and woodland cover, or orchids) and experiential (e.g. out-of-sight vs. public activity, generally expressed in terms of breathing space, refuge, recreation, outdoor activity or amenity). Griffin saw this potential and sought to realise it, and it has become ever more potent for subsequent populations as urban encroachment has intensified. And for some who have read about the conflicts, or were actually there, what remains of the Black Mountain ecosystem can be seen as a symbol of resistance to imprudent and damaging development and treatment.

3. Deep history

One of the distinctions of Black Mountain is that its foundations are the oldest rocks outcropping in the Canberra district. Because this earth story is detailed in another symposium paper (Finlayson 2018), it is only lightly developed below.

To the west and north, the Pittman Formation and Acton Shale date from the Late Ordovician period (c.460 million years ago [Ma]), when the area lay deep under the ocean, leaving us sandstone, mudstone and shale, with fossils of simple marine graptolites. To the east and south, the Black Mountain Sandstone and the State Circle Shale date from the earliest Silurian period (c.428 Ma), when sediments were deposited in the ocean a long way from land. Between these two periods, and subsequently, major earth movements (c.444 Ma) led to intense folding, faulting and uplift on the eastern margin of what would later become the Australian continent. Around 350–330 Ma, in the

Devonian period, the sea began to withdraw, and from this time onwards the region would remain above sea level. With no significant vegetation on the land there was massive and prolonged erosion -400 million years is missing from the geological record of the Canberra district, with no trace of material laid down between the late Silurian (up to 416 Ma) and the last 10–2.5 million years (Finlayson 2008).

More recently, the Pleistocene (2.6 Ma to 11,700 years ago) was a time of highly variable climatic regimes, swinging between glacial phases (drier, with lower sea levels) and warmer phases (wetter, with higher sea levels). Evidence indicates four or five major glacial phases in the past 40,000 years. The last began 30,000 years ago. At its peak, temperatures were cooler by about 9°C, and the high country had an ice cap of about 50 sq. km (Cane 2013). By 25–18,000 years ago, most of the continental landmass was in extreme perpetual drought. This was a time of low humidity, high wind speeds, high evaporation, high summer heat, cold southern air masses pushing further into the continent, and more frosts inhibiting plant growth. This lasted about 10,000 years — the coldest and driest period, and the most hostile living environment in human history (Horton 1994:201).

In the Canberra district these conditions led to a landscape dominated by subalpine grasslands rather than today's eucalypt forests and woodlands, enabling significantly greater erosion rates. On what we now know as Black Mountain, snow and ice resulted in frost-shattered rocks eroding down steep slopes and accumulating as large aprons of rocky sediment (fanglomerates) on the lower slopes (Woolnough 1938; Öpik 1954). These are evident today in gullies around the base of the area, and notably in the rainforest gully of the Australian National Botanic Gardens (Finlayson 2013).

A number of writers (Woolnough 1938; Öpik 1954) suggest that during that dry phase of the Pleistocene (c.25–18 thousand years ago) the central Canberra valley floor was occupied by an ancient Molonglo Lake or 'Lake Canberra', dammed by fanglomerates washed from Black Mountain slopes. This 'fossil lake' would have been similar in position to Lake Burley Griffin, although deeper, wider and longer.



Fig. 1. A postulated Pleistocene 'fossil lake' on the Molonglo; Black Mountain at upper left. Source: Öpik (1954:147).

The fanglomerates were crucial to formation of the central Canberra floodplain on the Molonglo. This floodplain was a major attractor and focus for human use over millennia, and early in the

20th century it was a notable factor in selection of the site of the Federal Capital, favouring creation of 'ornamental waters'. So, in a sense, the mountain made the floodplain that later made the city.

4. 'First Settlement'

The ancestors of Aboriginal people walked in the landscape we now call Canberra at least 21,000 years ago (Flood 1980:18). Those First People witnessed the last phases of the Pleistocene, and perhaps that ancient lake. The Molonglo floodplain was an important place over many thousands of years, as one part of a mosaic of important places for Aboriginal people.

Recounting this part of history is inherently constrained by dilution, dormancy or demise of many Aboriginal stories and songs, rituals and art, and their meanings. We depend often on a 19th century European perspective compiled decades after the periods or events which they describe. However, when this is blended with evidence from the archaeological record and voices of Aboriginal people today, an enriched story tells us that, despite a promising start in the Canberra district, the meeting of native and new settler cultures would (as elsewhere) result in disease, death and displacement for Aboriginal people, but ultimately would demonstrate their resilience and endurance.

The First People had been attracted to settle the area for the same practical reasons that explorers and settlers would later seek it out and sing its praises — easy access in multiple directions, low relief areas with waterholes and grasslands, higher places to provide shelter from adverse winds or to stay drier and warmer, and to provide views over the landscape on which they relied for survival. Together these places provided a wide range of sources of food and fibre, and raw materials for medicines, dyes, ornamentation, glues and tools.

Aboriginal people are known to have 'lived lightly', by applying sophisticated ecological knowledge of patterns and cycles to enable the landscape to recover from disturbance and from use of natural materials. These first settlers modified the landscape to suit their needs. For example, patch burning served to flush out game, favour certain plants or vegetation structures for their use or as food to attract game animals, and to open up the landscape for easier passage and safety (McBryde 1996:75).

Accounts from explorers and early colonial settlers later recorded native fires and evidence of patch burning across the Molonglo area in (at least) 1820, 1822, 1824 and 1832. This likely played a part in creating the landscapes described in those accounts. Most of the hills and slopes above the treeless plains were lightly timbered, open and grassy, free from scrub. Mount Pleasant was "covered slightly with gum trees" and Ainslie–Majura was a "Range of Fine Grassy Hills" (Gammage 2013:275–280).

In the Canberra area Aboriginal people are recorded as harvesting a wide range of foodstuffs. 'Greater Black Mountain' would have provided kangaroos, wallabies, bandicoots, wombats, possums, native cats (quolls), pigeons, turkeys, eggs, snakes and lizards, grubs and insects, grass seed, tuberous roots and yams, berries, gum, nectar and honey, while plains and adjacent streams provided platypus, waterfowl, emus, brolgas, fish and shellfish. (Wright 1923:59; Watson 1927:14; Bluett 1954:6; Kabaila 1997; Jackson-Nakano 2007; GML 2013)

Sources of materials for tools and weapons were well known, and accessed by traditional pathways. Materials such as stone, bone, shell, wood, fur and ochre were transferred between groups, with each offering materials from their own Country. These exchanges were often associated with intergroup ceremonies that confirmed or strengthened ties of friendship (McBryde 1996; CSD 2012). The foot of Black Mountain was notable for such gatherings and exchanges (Gillespie 1984:12). In some accounts Black Mountain, aka Black Hill (Gillespie 1984:2) or Black's Mountain (Bluett 1954), may have been named for the Aboriginal people who gathered there (Gugler 2009:146), although other origins are suggested, arising from fires (Gammage 2013:279). Later accounts commonly ascribe its name to the relatively dark or sombre appearance of the mountain in the landscape.

The archaeological record confirms that the area below Black Mountain was an important place to gather. In the 1920s and 1930s HP Moss collected hundreds of artefacts, with "the spur from Black Mountain" (now Black Mountain Peninsula) among the richest in "the larger artefacts". In the 1970s Lyall Gillespie also collected hundreds of surface artefacts from Black Mountain Peninsula, with the presence of imported ochre reinforcing the ceremonial importance of that site (Gillespie 1984:13).

The impounding of Lake Burley Griffin submerged a number of areas valued by today's Aboriginal community: riverside sites where artefacts were collected from the surface or from sand pits, subsequently affected by sand and gravel extraction and inundation, precluding further study; two ceremonial (corroboree) sites, on the site of the old Acton racecourse (Springbank) and below Mount Pleasant; and a reported rock art site associated with limestone caves.

Recent oral histories recalled a series of stone cairns on Black Mountain, with other stone arrangements on Stirling Ridge across the river. These include material not found in that vicinity, including white quartz from the Molonglo River or from Fyshwick/Jerrabomberra. Some cairns are likely to have had a ceremonial purpose. Others may have been directional, although dense timber regrowth now restricts outward views and conceals their location (Gugler undated).

Importantly, beyond its practical utility, Aboriginal people have both valued and acted on the area as a storied landscape, where places and pathways and spaces in between offer history, meaning and lore, and where ancestors express their influence on the world and how to live in it ('landscape as text').

5. 'Second Settlement' (1820–1860s)

The lives of local Aboriginal people would never be the same after December 1820, when European people first entered the Molonglo valley. This paved the way for southward expansion of the colony of New South Wales to Lake George, the Canberra area, and the Monaro. A party led by Joseph Wild and including Charles Throsby Smith and James Vaughan provided the first account of the district later known as Limestone Plains for the outcrops of that stone along the river (Fitzhardinge 1954). Smith's journal described the open landscape as "a very extensive plain, fine rich soil and plenty of grass" with "a Beautiful River that was running thro' the plains" (Watson 1927:7–8).

The first printed account appeared in the *Australian Magazine* of June 1821. Dr Charles Throsby (uncle of Charles Throsby Smith), after locating the Murrumbidgee River, described the country as "perfectly sound, well watered with extensive meadows of rich land on either side of the rivers; contains very fine limestone, in quantities perfectly inexhaustible, slate, sand-stone and granite fit for building, with sufficient timber for every useful purpose ..." (Fitzhardinge 1954).

Such descriptions proved irresistible to pioneer settlers of European descent. For Aboriginal people this landscape had been peopled since the beginning of time, imbued with living meaning and significance. For colonial pioneers it was uninhabited, unsettled or at least uncivilised, and it was theirs for the taking. The colonial mode of settlement included claiming proprietary ownership of specified land, importing materials and domestic stock, and applying European pastoral and agricultural practices. This sought permanence for personal/family economic gain, while also developing fixed and supportive village-style communities, with increasing population density, again based on European models. The colonial settlers placed great pressure on Aboriginal people. They wanted the same places.

The first Europeans on the Limestone Plains were employees of JJ Moore, who grazed sheep in 1823 at 'Canberry' (now Acton) (Fitzgerald 1987:12). Moore had Anglicised the name thought to have been used by the local group of Aboriginal people for the landscape encompassing river, creek and mountain (Jackson-Nakano 2005:6). It was now applied to his land holding, the low-relief area between modern Black Mountain and Mount Ainslie (Canberry Plain), the creek (Canberry Creek, now Sullivans Creek), and Black Mountain and adjacent hills (the Canberry Ranges) (Wilson 1968: 61, 178). Due to a series of droughts and economic depression in the 1840s, Moore was forced to

sell his holding. It was purchased by Arthur Jeffreys (son-in-law of Robert Campbell of Duntroon), and renamed 'Acton' after his ancestral home in Wales (Fitzgerald 1987:13).

In 1831 John McPherson acquired land to the west of Moore at 'Springbank', becoming the first resident landholder of the colonial settlement phase. During the 1830s additional parcels of land were acquired nearby, with Francis Mowatt occupying low lands to the south-west of Black Mountain, transferred in 1837 to TA Murray and Thomas Walker (of 'Yarrowlumla'). In 1836 McPherson acquired additional land to the north and west over Black Mountain, and to the south along a spur (now Black Mountain Peninsula). McPherson leased the property to the Kaye family from 1842 and moved to Port Phillip.

Definition of these parcels of property was made possible by the work of early surveyors who mapped high points and major watercourses, and triangulated the corners of portions of land. The first general survey was by Robert Dixon (1829) whose map showed Black Mountain as a shape, followed by the first detailed survey by Robert Hoddle (1832), whose map labelled it. In 1834 Surveyor-General Thomas Mitchell published the first map of the Colony of New South Wales, and the County of Murray was proclaimed at the Limits of Settlement. Black Mountain was now an official geographic feature, known to the broader world.



Fig. 2. Earliest named depiction of Black Mountain – part of Hoddle's 1832 survey of Limestone Plains. Source: National Library of Australia, nla.obj-230053470.

A quarry was opened at Black Mountain to extract sandstone in the 1840s. Its output remains visible in window and door mouldings at St John's Church, Reid, the first church to be built in the district (1845). It is also visible in St Ninian's, Lyneham, built as the first permanent Presbyterian church in the district (c.1873), which has walls built of sandstone rubble from Black Mountain, with brick arches.

Although some settlers recognised and respected Aboriginal occupation of the landscape, it was largely inevitable that misunderstandings would arise, and that Aboriginal people would not be able to resist the wave of colonial settlement and accompanying disease, prejudice and alienation. After 1840, as the European population increased, Aboriginal people were increasingly camped close to settlements. Groups of Aboriginal people of mixed descent turned to begging, and became dependent on handouts of tea, sugar, flour, tobacco and alcohol, with adverse health outcomes.

Other groups chose to move further away from the settlements and into more remote uplands (CSD 2012).

It is commonly stated (e.g. Gillespie 1991:34) that there is little evidence of hostility and violence between Aboriginal people and European settlers on the Limestone Plains, although this was clearly not the case in neighbouring Eden–Monaro and Yass during this period. Some caution is required in accepting such statements ('other places, but not here'), as similar claims were made for districts where hostility and violence have since been well documented (McKenna 2002:203).

On the Molonglo floodplain, even the more benevolent settlers were engaged in securing and exploiting the land and water that had supported Aboriginal people for tens of thousands of years. The landscape was progressively altered to suit agricultural and pastoral practices, with clearing, timber-getting, fencing, conversion of ground cover to exotic plant species, grazing, and erosion on hillsides with diminished cover. Native animals were shot, trapped or poisoned in large numbers (sometimes to local extinction). They also declined in the face of competition for resources from thousands of sheep, cattle and horses, as well as rabbits, foxes and new breeds of dogs (CSD 2012). These effects would have been exacerbated by drought conditions that prevailed in the late 1820s and through the 1830s (Avery 1994).

Europeans also unwittingly introduced exotic diseases to which Aboriginal people had no immunity, particularly measles, tuberculosis, influenza, smallpox and venereal disease (Avery 1994; Wood 2009). This triggered a steep decline in Aboriginal population numbers in the 1830s and again in the 1850s and 1860s with measles and influenza. (Flood 1980:32)

Growth in human population and stock numbers, proliferation of fences, and depredation from rabbits increasingly restricted Aboriginal access to meeting grounds and other traditional places across the landscape. In the 1850s there was nowhere left to practice Aboriginal traditional life on the tablelands. This was marked by the cessation of Bogong Moth harvests, with the last recorded gathering for their exploitation at Uriarra in 1859 (Sydney Morning Herald 11.6.1927, cited in Avery 1994, chapter 2). Also finished by the early 1860s were the large inter-tribal meetings and corroborees that had been observed and recorded by early settlers. (Gale 1927:64–65; Gillespie 1991:149; Jeans and Jack 1996)

6. Closer settlement (1860s–1900s)

From 1861, NSW legislation (the Robertson Acts) allowed people to select small holdings (between 40 and 320 acres, later 640 acres) within Crown land. This coincided with the decline of gold rushes and with a peak in immigration, particularly from Ireland (Wood 2009). It enabled some closer settlement in the Canberra district, and some shift from pastoral to agricultural land use, but did not affect large grant and freehold portions on major watercourses that had been taken by earlier settlers (Watson 1927:60).

On the one hand, closer settlement enabled people of limited means to own land; on the other, carving the landscape into small blocks was unwise, as it did not take into account the capability of the land. In the Black Mountain area, smaller blocks were surveyed to the north-west of the original large blocks at 'Canberry' (Moore), 'Springbank' (McPherson) and 'Yarrowlumla' (Mowatt). The new holdings were timbered blocks with no reliable water and inevitably many of the original selectors were bought out by larger landholders or by fellow selectors aggregating acquisitions into larger, more viable holdings. The legislation required selectors to boost and maintain productivity of their small holdings by 'improvement' such as ringbarking trees, clearing, fencing, and damming streams. By the 1880s larger landholders also began fencing and ringbarking to boost productivity (Shumack 1967:111–112).

For selectors, ringbarking was the cheapest and easiest way to fulfil their statutory obligation to improve their land and begin cultivation (Bonyhady 2000:179). It had been advocated as an

essential tool in agricultural development since at least the 1850s (SMH¹ 5 Jul 1850:2) and "treemurder by ring-barking devastated the country on a gigantic scale" (Hancock 1930:33). Despite apparent legislative limitations on the practice, by 1884 the NSW government had authorised the ringbarking of almost four million acres, and the same area again by 1888 (Bonyhady 2000:181).



Fig. 3. Closer settlement blocks cram in between the larger original holdings in Parish Canberra (1912), also showing the Forest Reserve (FR 129), the Weetangera Road and Finnerans Road. Source: National Library of Australia, MAP G8971.G46; nla.obj-232870607.

While acknowledging productivity gains for grazing from ringbarking, there was growing concern about its aesthetic impact and its potential role in reducing rainfall, increasing droughts and flood runoff which, if true, made the practice "a national calamity" (Goulburn Herald & Chronicle 16 Dec 1871:4). In ensuing decades there were increasing calls to cease ringbarking on steep hills in the Canberra district, as elsewhere, because it brought heightened risk of sudden and destructive floods (Mahony and Taylor 1913:20; Eyles 1977). Within the Federal Territory, this concern would prompt belated calls for "forest preservation", with one writer (1910) stating that "The suicidal cutting and clearing of every inch of timber is appalling" (Taylor 1910:13).

Introduced animals heightened the impacts of colonial settlement by denuding the landscape. Rabbits and hares had become pests by the end of the 19th century, with a dramatic impact on crops and ground cover. Shooting in weekly rabbit drives and hare drives proved more effective than trapping and poisoning, but ultimately landholders had to erect wire netting fences to exclude them (Shumack 1967:152–154, 161). The fox became a pest by killing domestic poultry and attacking

¹ Sydney Morning Herald

lambs (QA² 9 Aug 1902:2), and fox drives too became regular events. As one indication of the scale of killing, a Queanbeyan skin buyer in 1912 advertised to buy 20 tons of rabbit skins and 2,000 fox skins (QA 4 Oct 1912:5).

Rabbit, hare and fox drives killed countless native marsupials (Gillespie 1991:68). Native animals were also directly impacted by indiscriminate killing as pests, for the dinner table, for fur, for sport or for the sheer fun of it. It was not long before some native species were eradicated locally.

Many native birds were seen as pests from the 1870s onwards, including magpies, many parrots and cockatoos (Shumack 1967:152). By the end of the 19th century, local extinctions of the larger birds of the plains and hills included the brolga (native companion), emu and bustard (wild turkey, plains turkey) (Gale 1927:127; Gillespie 1991:193; Wilson 1999). In Black Mountain and other forested areas, the brush turkey (tallegella) was extinguished locally, along with many types of native ducks and geese, pigeons and quail (Gale 1927:128).

Native mammals large and small also came under great pressure from settlers. Marsupial populations had been kept largely in check by predation from Aboriginal people and from dingoes/wild dogs. With the decline of the former and concerted efforts to eradicate the latter, coupled with pasture improvement, these populations increased significantly, noticed even in the 1850s. Across NSW between the 1880s and 1900s most years chalked up the taking of millions of kangaroos and wallabies, hundreds of thousands of kangaroo rats (bettongs), scores of thousands of possums, bandicoots, pademelons and crows, thousands of eagles, hawks and emus, and hundreds of wombats (Hancock 1972:113).

In the local district, the first kangaroo and wallaby drives took place in 1880 (Shumack 1967:152), some lasting up to ten days and yielding many hundreds of kills (Gillespie 1991:67). In 1891 alone the local Pastures & Stock Protection Board paid bounties for 21,151 wallabies (Gillespie 1991:213). By the early 20th century, local near- or total-extinctions included bandicoots, wombats, koalas (native bears), echidnas and kangaroo rats (bettongs) (Gale 1927:129, 131, 134; Gillespie 1991:213, 298). Possums too were seen as a big pest by the 1870s, with regular organised shooting and trapping (Shumack 1967:152).

Pressure on the environment from production stepped up as the 19th century progressed. This was due partly to the impacts of drought, flood and severe economic depression, as landholders engaged in more radical or desperate practices to reduce their losses. It was also a result of increasing mechanisation of agricultural technology, as steam-operated farm machines replaced horsepower (GML 2013). It was further influenced by improved access to and from markets, after the railway reached Goulburn in 1869 and Queanbeyan in 1886 (Watson 1927:56, 65).

In the second half of the 19th century there were many setbacks and hardships to be faced from weather. In the Canberra area, a scan of the period 1850 to 1900 indicates some 24 years of 'hot and dry', including dried-up streams, heatwaves, dust storms, fires, grasshopper plagues, and some 30 years of 'cold and wet', including flooding, intense rain, destructive hailstorms, heavy snow or frozen streams. Some of these years include occurrences of both extremes. Only in about ten years of that half century do records not prominently indicate noteworthy or extreme weather events (Butz 2016:8).

Fire was an additional natural hazard for the pastoral and agricultural community. Localised grass and bush fires were almost annual events, but widespread and destructive fires affected the whole community and the district's economy. "Great fires" are recorded in the Canberry ranges (Black Mountain and adjoining hills) in Jan 1846 and Jan 1847 (Wilson 1968:178, 186). Damaging fires are recorded in 1858, 1865–66, 1869, 1875 (QA 27 Jan 1875:2), and 1888, with some respite until the worst fires in the district's recorded history occurred in 1904–05 (Shumack 1967:113).

This apparent increase in destructive fires may have been partly a result of reduced Aboriginal burning of the landscape, which helped to create the open and grassy landscapes encountered by

 $^{^{\}rm 2}$ The Quean beyan Age

explorers and early colonial settlers. Numerous accounts indicate that Aboriginal people burned parts of the country most years to create a selective patch mosaic of vegetation structures that favoured some plants or animals, and for ease of access, visibility and safety (McBryde 1996:75). By contrast, colonial settlers may have inadvertently encouraged the dominance of shrubs and trees, either by burning too frequently and too severely, or by protecting their land holdings from any fire (Hancock 1972:25–26). Or this may have been due to an alternating or inconsistent application of both approaches over time, in response to changing generations, ideas, legal obligations, or opportunities.

The timbered areas of the Molonglo valley and surrounds appear to have developed considerably denser overstorey and understorey since the second half of the 19th century, increasing the potential for more intense fires over larger areas. When coupled with prolonged drought periods, the pastoral and agricultural community faced more frequent and more severe threats to their stock, pasture, crops, stored fodder, buildings, fences and other structures, and their very lives.

Increased population resulting from closer settlement also placed more pressure on areas such as 'Greater Black Mountain' as a source of bark and timber for building, fence posts and firewood. In 1881 a Forest Reserve was established in the north-western section, presumably to avoid its alienation into private hands and excessive clearing of an important resource.

The increase in population was sufficient to justify establishment in 1880 of Canberra's second school, at 'Springbank' at the south-east corner of Black Mountain. This property was held by the Cunningham family (of 'Lanyon') from 1875 and from the late 1880s by William Sullivan, whose surname was transferred to the creek formerly known as Canberry Creek. Early 20th century photographs of Black Mountain show fairly dense tree cover on most of the range, except for clearing (by Sullivan) of the south-eastern slopes and lower eastern foothills (Fraser 1981:4).

There are accounts that new arrivals in the Canberra district from the 1860s were less tolerant towards Aboriginal people in and around towns, and such hardened attitudes are likely to have encouraged further dispersal. This displacement was probably viewed by Europeans as an inevitable, albeit unfortunate, consequence of the 'march of civilisation'. Although significant, it was not a total decline and the local Aboriginal people were certainly not 'extinct' (Wood 2009) but instead kept adapting in the face of dramatic social dislocation and poverty. There is ample evidence that descendants of the local Aboriginal people continued to live and work in the district, and that many of those who had been moved away kept alive their connection with Country (Jackson-Nakano 2001:167; Brown et al. 2007).

Many of the access routes in the area are likely to have followed well-trodden Aboriginal routes, gradually widening and at times deepening before becoming formalised. The Weetangera road connected the road from Canberra to Yass with the junction of the Murrumbidgee and Molonglo rivers and with the Uriarra road. As the name suggests, Weetangera (property, post office and school) lay about halfway between these two points. The route appears on maps of Parish Canberra as a reserved road (NLA³: nla.obj-232870607), climbing between modern Bruce Ridge and O'Connor Ridge, to follow a low gradient route to the west. Segments of this route remain visible today.

Another reserved road bisected the 'Greater Black Mountain' area, forming a loop from the Weetangera road in the north-east, emerging to the south-west below Mount Painter and then swinging north-west back to the Weetangera road (NLA: nla.obj-233544419). A 1914 Canberra topographic map (NLA: nla.obj-230052045) labelled this as 'Finnerans Road'. The history of this route is uncertain, along with the identity of Finneran, although it is considered a 19th century route (Navin and Officer 2002:2, 21). It seems likely that it began as a low-gradient walking route through forested 'Greater Black Mountain', following creek lines and open flats. It would have provided access to the Round Hill (Mount Painter) area, and to numerous small holdings from the closer settlement phase. Much of its north-east–south-west alignment remains visible as a fire trail within

³ National Library of Australia, https://www.nla.gov.au/

Black Mountain Nature Reserve (although on some maps and signs it was labelled as 'Old Weetangera Road', an error now remedied).

7. 'Third settlement': the Federal years (1900–1950s)

As the 20th century dawned, years of negotiation culminated in the six self-governing colonies combining in a Federation as the Commonwealth of Australia, with effect from 1 January 1901. A site was sought for the seat of government in a new Federal Capital city between Melbourne and Sydney (and closer to the latter). After a protracted process, the Yass–Canberra option was selected in 1908, and surveyors were tasked with defining a suitable location for the city.

The New South Wales Government ceded the Federal Capital Territory to the Commonwealth in 1911. Compulsory acquisition of freehold land was approved shortly after (Argus [Melbourne] 18 Jul 1912:5), with resumption to be at valuation based on 1908 prices. The Commonwealth would own all land in the Territory and occupancy would be under a leasehold system (QA 2 Sep 1910). Residents stood to lose their homes, livelihoods and their connections with a community, and decisions about land now required approval of Commonwealth officials (Wood 2009).

Acquisition took decades to complete and resulted in compensation well below the value of the land. Hardest hit were some of the small operators who had been assisted to acquire their land holdings by the Robertson Land Acts half a century earlier. It also had the effect of disenfranchising residents in the Territory. They now had no political representation in local, State or Federal governments, and would not have for some decades. The people directly affected by the establishment of the Territory and city had no real say in what happened and how it happened (Wood 2009).

Just as Aboriginal people had guided explorers and settlers to previously uncharted lands, only to be dispossessed, it was now the lot of European landholders to be dispossessed, by the very changes they had advocated. They too could not have foreseen the consequences, they too experienced loss and grief, they too resented their unfair treatment, and they too were ultimately powerless to stop the changes, although they too did resist them.

When the first contour survey map of the site was produced by Charles Scrivener in 1909, it omitted Black Mountain but indicated a steep escarpment to the north-west of the city site, forming a natural boundary to potential placement and extent of the city (Reid 2002:15). The spur from the mountain (now Black Mountain Peninsula) was a major feature that helped to define the shape of future 'ornamental waters'. On the more detailed contour survey of the area in 1910, signed by Scrivener, drawn by FJ Broinowski, Black Mountain was a blank, providing a suitable location for the map title, while the escarpment looked more like towering ramparts. This was accentuated in a three-dimensional plaster model, covering the area of the map with a fourfold vertical exaggeration (CoA 1911:12; Reid 2002:27; NLA: nla.pic-vn4189491). For the new city, Black Mountain was off-the-map, portrayed as limiting, unknowable or even foreboding, in the cartographic tradition of 'Here there be dragons'.

One of the early assessments of the Canberra area was a study in 1910 by T Griffith Taylor that graphically illustrated the topography of alternating plains and ridges, with the northern Canberra plain defined between the range extending north from Black Mountain and the parallel range connecting Ainslie–Majura and Gooroo (Taylor 1910). This investigative phase for the new city included reports from geologists, notably Pittman in 1911, who noted that small quarries had been opened "in only two or three places" on Black Mountain, with mixed results casting doubt on suitability of its sandstone for construction (Pittman 1911), doubts echoed by later writers (Woolnough 1938; Noakes 1954). This structural unsuitability spared the area from more extensive quarrying.

Reports from Taylor and Pittman, the early contour survey maps and the plaster model formed part of the resources available to those who sought to win the international competition to design the new federal capital. Ultimately, Walter Burley Griffin submitted the winning design, with his wife Marion Mahony Griffin. His landscape was a vision splendid: "Taken altogether, the site may be considered

as an irregular amphitheatre — with Ainslie at the north-east in the rear, flanked on either side by Black Mountain and Pleasant Hill, all forming the top galleries; with the slopes to the water, the auditorium; with the waterway and flood basin, the arena; with the southern slopes reflected in the basin, the terraced stage and setting of monumental Government structures sharply defined rising tier on tier to the culminating highest internal forested hill of the Capitol; and with Mugga Mugga, Red Hill, and the blue distant mountain ranges, sun reflecting, forming the back scene of the theatrical whole." (Griffin 1913:3).

Once again, Black Mountain was seen as a dominant landscape feature, defining the north-western limit of the city development. Within the city area, the Griffin plan was for an extensive lakes scheme on the Molonglo floodplain. He saw the Molonglo here as "a feature of the botanical gardens and forest reserve continuous with Black Mountain, incidentally perpetuating there the only remnant of primeval luxuriance on the city site" (Griffin 1913:7). The high ground of Black Mountain was an integral part of the balances and contrasts that characterise the Griffin design, as a high point at one end of his Water Axis, with the low-lying Lake Park at the opposite end.



Fig. 4. Griffin Plan 1916–1924 showing visual axes; Black Mountain at the north-western end of the Water Axis. Source: National Library of Australia, nla.obj-230044617.

Although establishment of the new capital enabled the 'third settlement' phase, it had a very slow start. In 1913 the city was named Canberra and in 1914 the nation entered the Great War. Development of the city was almost at a standstill, although Griffin continued to plan and Thomas Weston continued to plant trees. To the south-west of Black Mountain, "three Green Hills" were to be planted with dark green trees (cypress and cedars) as a western skyline backdrop. Griffin also planned a Continental Arboretum here, representing vegetation from the seven continents (Taylor 2006:67). In 1916 Weston planted the first elements of the Continental Arboretum, with cork oaks established. Nearly a century later, Griffin's concept was to be echoed in the National Arboretum, taking in that cork oak plantation.

Griffin also had ambitious plans for the inner hills and slopes around the Molonglo floodplain, with a colour scheme for planting based on flowers and foliage, known as "the coloured hills scheme". In 1916 he proposed that Black Mountain would have a white and pink scheme, with Japanese cherries, plums, peaches and almonds. Changes in 1918 and 1919 shifted to ground covers, with

Black Mountain to be the "Golden Hill", but the scheme was not completed (Gray 1999:89–90, 100–107; Taylor 2006:68–69).

Little changed for Black Mountain in the War years, although in 1914 a rifle range was established on the spur (now Black Mountain Peninsula), with participants shooting towards the mountain and 'Rifle Range Hill'. This range was in use until 1925 (CT⁴ 21 May 1974:15; CT 24 Jan 1979:30).

Canberra grew quickly in the mid- and late-1920s, ahead of the opening of Federal Parliament in 1927. The administration sought to increase local food production for the growing city; for example, a dairy operated at 'Springbank' from 1924 to 1928. It was also developing a more sophisticated air in this period, with initial moves to establish a university (from 1929 as Canberra University College) along Sullivans (formerly Canberry) Creek (CT 12 Mar 1934:16). To the south the Royal Canberra Golf Club and the Canberra Racetrack were established on the floodplain in the 1920s. Although major floods in 1922 and 1925 caused some rethinking of urban form, development proceeded apace.

This had direct implications for Black Mountain, with the sandstone quarry reopened in 1926 to supply stone crushed for road metal and concrete (Woolnough 1938). Firewood gathering was regulated a year later (CT 30 Aug 1927:4), and experimental coppicing plots were established in Black Mountain in 1928–29 to increase supply of firewood, posts and poles. The first of these assumed dominance, with establishment of a "firewood treatment system" in 1930 (CT 26 Aug 1930:2), and by 1930 Black Mountain was being referred to as a "firewood forest" (CT 17 Jan 1933:3).



Fig. 5. The map redrawn again as small holdings are aggregated into larger leased parcels; Block 68 shaded green is an enlarged Black Mountain forest reserve. Source: ArchivesACT, undated.

On its eastern flank, the first buildings of the CSIR⁵ were established in 1929–30 (CT 12 Mar 1963:37) and the University grew through the 1930s. A water reservoir was built above these institutions commencing in 1932, providing some unemployment relief in the wake of the Great Depression (CT 26 Oct 1932:3; CT 12 Jan 1935:2).

Pastoral pursuits continued, and in 1933 properties adjoining Black Mountain included: to the west 'Springvale' (Shumack), to the south-west 'Glenloch' (Vest), to the south-east 'Springbank' (Corkhill) and the Kaye family (ArchivesACT: Dept of the Interior Rural Land & Property

⁴ The Canberra Times

⁵ Council for Scientific and Industrial Research

Register). Environmental hazards continued also, with floods in 1934 occasioning rescue of stock, damage to the golf links and destruction of tourist camp huts at Acton (CT 26 October 1934:1). The extensive bush fires in 1938–39 then burned across the whole Black Mountain area (CT 16 Dec 1938:2).

The population of Canberra was about 10,000 when Prime Minister Menzies declared that Australia was at war with Germany and triggered a rapid expansion of population in the form of about 3,000 families of public servants, plus military personnel and diplomatic staff. This helped to bring on suburban development in Turner adjacent to Black Mountain.

In the period following World War II Canberra began to experience urban pressures and these in turn impacted on Black Mountain. The quarry was reopened to provide road metal and dust for concrete making (operating 1945–1955) (CT 10 Jul 1946:4). A tip for household and trade waste, coupled with a dog pound, operated at what is now Black Mountain Peninsula (1951–1964) (CT 21 Oct 1955:2; CT 30 Jul 1964:3). New forestry experimental/test areas were established in Black Mountain each year in 1946–50, totalling 220 plots (Jacobs 1950:60). Additional eucalypt species were sown to test their suitability, including *E. globulus, E. fastigata,* and *E. cinerea* (most lost in 1965–66 to urban development) (Kremer 1969:135).

In 1948–49 the Government woodyard ("Black Mountain woodyard") was selling firewood to the public, later restricted to government establishments (CT 30 Nov 1948:4; CT 13 Apr 1950:3). This was located at the eastern end of the Weetangera Road near Dryandra Street, O'Connor. Supplying fuelwood was a significant challenge. One account (1954) stated that most firewood for the city was sourced from old ringbarked trees in former pastoral holdings, and this supply was diminishing. It estimated that a city of 50,000 people required at least 60,000 tons of firewood each year (Rodger and Jacobs 1954:192).

Underscoring a sense of indifference to impacts on the bushland, few seem to have been concerned when in 1951 an artillery simulation at the old Racecourse at Acton was lobbing mortar rounds into Black Mountain, at least until the activity started fires (CT 17 Apr 1951:4). Conversely perhaps, the growing capital was attracting increasing numbers of visitors, and a new tourist camp or "motorists' camping area" was established in 1945 at the foot of Black Mountain next to the suburb of Turner (CT 29 Dec 1945:3). This underwent frequent upgrades through the 1950s and by 1960 was known as "Mountain Park Motor Camp" (NLA: MAP G8984.C3G46 s9 1961; nla.obj-362083787).

A geological map of 1953 by Öpik (NLA: MAP G8984.C3C5 1953; nla.obj-364679318) suggests it was not only surveyors of the mid 1800s and early 1900s who named topographic features in the area. The map labelled features named after geologists who worked in the Canberra region in the 1900s–1920s, suggesting Öpik had ascribed the labels. Pittman Valley, Clarke Ridge, Andrew Creek, Carne Creek and Etheridge Creek did not survive on later maps.

8. Rapid urbanisation (1950s–1970)

Canberra grew in fits and starts in the face of reluctance to finance the capital. More than four decades after Canberra was named, the Menzies government decided it was time to deliver the national capital. It was to experience a massive growth spurt, with Menzies ensuring it would be sustained. From the late 1950s, under the management of the National Capital Development Commission (NCDC), the lake was finally created and framing infrastructure and notable buildings shifted from temporary to permanent. Canberra was shaped by the agreed Griffin Plan (1925) in its overall layout of the central area, but otherwise was to be a thoroughly modern city with all that new technologies could offer.

Because of the location of 'Greater Black Mountain', it was inescapable that its 'primeval luxuriance' would be compromised to satisfy the needs of a 'modern' city for major roads, powerlines, TV towers, more rubbish dumps and car dumps, gravel pits and quarries, new towns, reservoirs and more modern tourist developments. Fortunately, the burgeoning population began to take a real interest in its non-use values and to call for conservation of Black Mountain. While the

new planners saw it as either an obstruction or a land bank or both, the community was already applying pressure to reserve the area.

In this period, initial plantings were made in 1949 for the Botanic Gardens, set into the eastern foothills of Black Mountain (CT 13 Sep 1949:4). The Royal Society offered talks about the area's native flora in 1950 (CT 23 May 1950:3), and botanist Nancy Burbidge led a campaign for reservation from at least 1959 (CT 23 Nov 1959:2), leading "flower rambles" from the early 1960s (Kelly 2007; see also Purdie 2018a).

Community concern was expressed from 1959 about proposed television transmission towers on the top of the mountain, citing the need for conservation of flora and fauna, and for protection of an unspoilt area in the city (CT 17 Nov 1959:2; CT 19 Nov 1959:2). These calls were echoed by the newly-formed National Parks Association of the ACT (NPA) who sought a green belt around the city (Manley et al. 1981), while local politician Jim Fraser championed protection of Black Mountain and the Botanic Gardens from encroachment by urban development (CT 12 Feb 1960:3).

City development would just not stop, however, and the 1960s saw an upsurge in direct threats to the integrity of 'Greater Black Mountain'. In Turner, the old gravel quarry became a rubbish dump and car dump, reached by an unsealed road behind the Tourist camp. A road was built from the reservoir to the summit (1961) (CT 28 Jul 1961:5), and the first TV mast for CTC-7 became 'Canberra's highest building' (1962) (CT 28 May 1962:23), closely followed by a second mast, for ABC-3 (CT 5 Sep 1962:5). From 1963 to 1966 new lookouts and car parking were established on the mountain, with additional developments on Black Mountain Peninsula, the summit road was upgraded and sealed, and terracing and retaining walls installed (CT 9 Mar 1963:8; CT 27 Apr 1963:3; CT 22 Jan 1964:12; CT 6 Feb 1964:37; CT 14 Oct 1964:3; CT 13 Feb 1965:4; CT 4 Sep 1965:3; CT 7 Dec 1965:3; CT 16 May 1966:15; CT 24 Dec 1966:15).

Over the same period, the first buildings were erected at the Botanic Gardens and the gardens were opened for inspection in 1967 (CT 18 Nov 1964:3; CT 27 May 1967:9; CT 27 Sep 1967:13; CT 1 Jan 1968:9), while the ANU re-purposed the old quarry in 1964 as the site for its new palaeomagnetic laboratory, remote from traffic (CT 14 Nov 1970:1).

Road infrastructure was to define the shape of an increasingly car-based city. The 1960s saw numerous proposals for new major roads, including a lengthy Yarralumla Bridge from the end of Black Mountain Peninsula to connect with Woden as the Yarralumla Expressway (CT 5 Aug 1964:6) (never built). It was development of a new town at Belconnen, serviced by major roads, that brought the greatest direct impacts up to 1970. Belconnen was inaugurated in 1966 and the first land auctions and handover of government housing took place in Aranda in 1967 (CT 6 Mar 1967:1). Aranda bore an Aboriginal name, as did all its streets, reflecting intentions of a bush suburb, nestled sensitively into the timbered foothills of Black Mountain. However, by 1968 there was a storm of protest at destructive tree clearing in the suburban development area and along its access routes (CT 3 Feb 1968:3). Perhaps as an act of atonement, Aranda became the first Canberra suburb to be landscaped entirely with Australian native plants (CT 13 Sep 1968:3).

Belconnen Way, opened in 1967 (CT 11 Nov 1967:3), represented the first significant dissection of the 'Greater Black Mountain' area, amplified by its expansion to dual carriageway in 1969–70 (CT 8 Nov 1969:3). This separated the southern (Black Mountain) section from the northern (Gossan Hill/ Bruce Ridge/O'Connor Ridge) section. There was much more to come: a planned extension to Parkes Way (1967) became a major road, the Molonglo Freeway (later Molonglo Arterial). This would separate Black Mountain from the Molonglo and nibble at the toe of its steep southern slopes. To cap off the 1960s, extension of Caswell Drive to join Lady Denman Drive near the cork oak plantation (1969) (CT 20 Dec 1969:3) served to separate Black Mountain from its western (Aranda Hill) section. Pieces of Bruce Ridge were gradually being alienated, and 1968 saw a new water reservoir at O'Connor (CT 18 Jun 1968:13), above a new modern Motor Village (CT 1 Nov 1968:14) and a youth hostel (CT 6 Feb 1968:1), while in the scattered remnant woodland north of Gossan Hill the foundation stone was laid for the Canberra College of Advanced Education (now University of Canberra) (CT 30 October 1968:2).



Fig. 6. The city pushes westward over the ridge in 1965 NCDC plans — dissecting the bush, taking over rural lands and subsuming the Weetangera Road and Finnerans Road. Source: National Library of Australia, MAP G8984.C3G45 1965 nla.obj-363942464.

By 1969 community concern was stirred by powerlines, roads, and water infrastructure (CT 16 Jun 1969:2). It was clear that 'Greater Black Mountain' was seen by planners as a land bank, although a fence was erected between the bush and the urban area, and walking tracks and pony trails were established (CT 23 May 1968:3).

Over the period 1964–1973 regular experimental fires were being lit in the area by the Forest Research Institute to develop models of bush fire behaviour and vegetation responses (CT 10 Nov 1964:16; CT 31 Jan 1973:24; Davis et al. 1977; Luke and McArthur 1978). This may have contrasted somewhat with community aspirations to protect rare and valuable natural assets of the area. Less disruptive research into the area's biota was being undertaken by CSIRO scientists, as it had been since the 1920s (Purdie 2018b). Coupled with increasing interest from ANU academics and students, this strengthened calls for conservation.

In 1970 the NPA stepped up its advocacy, criticising delays in reservation of Black Mountain pending decisions about roads, and also the fragmentation of the once extensive bushland area (CT 21 Feb 1970:2; CT 28 Feb 1970:3; CT 9 Apr 1970:1; CT 13 Apr 1970:2; CT 14 Apr 1970:3; CT 15 Apr 1970:3; CT 16 Apr 1970:17; CT 2 May 1970:3; CT 9 May 1970:7; CT 29 Jun 1970:3; CT 4 May 1971:1). Controversy was fuelled by reports that a planner from NCDC had told the NPA that it was "unrealistic to have natural bushland in the heart of the city" (CT 15 Apr 1970:3). In the same year the Botanic Gardens opened to the public, Barry Drive was extended and in the process displaced the old tourist camp at Turner (CT 16 Feb 1970:1), and the nearby car dump was closed (CT 14 Nov 1970:1).

After more than a decade of advocacy, gazettal of the reserve took place in 1970, under the Public Parks Ordinance (Government Gazette 62, 30 Jul 1970), with a draft management plan released in 1972 (Elliott & Douglas 1972; CT 13 June 1972:12).

This marks the point 150 years after the first European visitors to the Canberra district, and closes off the period of primary focus for this paper. By rights this point should have been a highlight and a victory from which the community would never look back. It was far from it. That story is

enlarged in other symposium papers (Beveridge 2018; Hogg 2018; Hotchin 2018;) but is outlined here in continuity with what preceded it.

9. Not the end of the story (1970 onwards)

The gazettal of Black Mountain as a nature reserve included a dotted line in the north-western corner — an area in which the planners wanted options to remain open for development of a major road (Government Gazette 62, 30 Jul 1970). This was something of an omen, as anything outside the reserve area became fair game for development, and the community rose up in protest.

Over the next two decades, Black Mountain became an arena for the battle between conservation and development, both within the reserve and around it. The first proposals for a PMG Tower emerged (1970) (CT 2 Nov 1970:1); a major powerline crossed the area (1973) (Manley et al. 1981); and the 'spaghetti junction' of Glenloch Interchange opened in 1979 (CT 11 Oct 1979:9). Protesters clashed with earthmoving equipment, firstly (1973–75) over the PMG Tower (CT 22 Sep 1973:1) and later (1977–79) over the Molonglo Arterial (CT 4 Feb 1977:1). Following establishment (1973) of the Citizens' Committee to Save Black Mountain (Manley et al. 1981), the well documented 'battle of Black Mountain', fought over the PMG Tower (later Telecom Tower; later Telstra Tower), lasted for years and exhausted the community (Hancock 1974). The tower was completed in 1980 and prompted a new round of conflict over proposals to access it by a cable car or gondola (CT 12 Nov 1980) (never realised).

The pace of urban redevelopment around the area was quite daunting. The core of Black Mountain Reserve became increasingly disconnected from its outliers by new facilities and roads constructed in what had been contiguous forest and woodland. In 1977 alone, construction delivered the Bruce Health Services Hostel (CT 19 Oct 77:3), the Wybalena Grove cooperative housing (CT 17 Jul 78:8), the Bruce Stadium (CT 8 Aug 1977:3) and Bruce TAFE (CT 24 Sep 1977:3). In the next five years we can add Calvary Hospital (CT 3 Mar 1979:3), the Australian Institute of Sport (CT 31 Jul 1980:36), an extended Bindubi St (CT 31 Mar 1980:8), the AV Jennings suburb of South Bruce (CT 12 Dec 1980:14), and Radford College (CT 27 Feb 1983:3). These were followed closely by the expansive Fern Hill Technology Park (Bruce) (CT 27 Feb 1985:7).

In 1984 the NCDC recognised the biodiversity value of Black Mountain itself, enhanced by the (now tenuously) connected forest areas of Aranda Hill, Gossan Hill and Bruce Ridge (NCDC 1984). In the same year they announced plans for the city's freeway system, which would completely encircle Black Mountain and irretrievably sever those same habitat connections. Through the second half of the 1980s controversy raged over these freeway proposals. At Black Mountain this focused on the John Dedman Parkway, the notional road for which that dotted line had been inserted within the gazettal of the reserve. The fate of Black Mountain was central to the controversy, with columnist Ian Warden (in 1986) describing the reserve as "the largest traffic island in the world" (CT 1 Oct 1986:23) and the larger bushland area as "land worthy of immunity from bitumen tentacles" (CT 8 Nov 1989:24).

These controversies amplified perceptions that the Canberra population was at the mercy of decisions by its Commonwealth Minister, seen as an indifferent 'feudal landlord'. The local Legislative Assembly was toothless by comparison, and editorials extolled the virtues of self-government in resisting paternalistic Commonwealth decisions. In 1989 self-government arrived, and the NCDC was abolished. We seemed headed for calmer times and reduced threats, but the legacy of NCDC plans remained.

A new century was marked by establishment of the Friends of Black Mountain (Canberra Chronicle 9 Oct 2001) in response to renewed moves to build the major road (now rebadged as the Gungahlin Drive Extension or GDE) to serve the new town of Gungahlin and to provide a fast route for heavy transports avoiding the city area. In the ensuing fight, in a series of ugly public meetings, planners were able to pit communities against each other because no-one wanted their suburb to be dominated by the freeway, and some communities were then divided further over details of siting. In the end, legislation was enacted to prevent any further court action being instigated against the

road, and that battle was effectively over. While the GDE was completed in 2007, the groundswell created by the fight continued, with ever-increasing interest in conserving what remained of the area's values.

Today there are other legacies of 1980s decision-making that appear to be more congruent with community valuing of the area. The Visitor Centre at the Australian National Botanic Gardens opened (1986) (ANBG undated), as the threshold to public appreciation of Australian native flora. Work on the National Museum of Australia was commenced (1986) with a visitor centre at Yarramundi at the southern foot of the mountain above the lake (CT 19 Sep 1986:9). Although the Museum site was later moved to Acton (1996) (NMA undated), the building remained and is now the Burringiri Aboriginal and Torres Strait Islander Culture Centre. Other sympathetic legacies nearby to the south-west include formal establishment of the Lindsay Pryor National Arboretum (2001) (Government Gazette, 1 August 2001:2195), the first stages of the National Rock Garden⁶ (2010–11) (Government Gazette, **20 April 2011:** 884) and the opening of the National Arboretum (2013) (NAC undated).



Fig. 7. The oldest rock substrate in Canberra fittingly dominates the view (artist's impression) from the (proposed) Education Centre, National Rock Garden. Source: Pillans and Smith (2016).

These nearby developments echo the foundations of the Black Mountain landscape story — the earth story and the First People — and also the first 'official' valuing of its wild nature by Griffin, and subsequently by scientists such as Pryor. Other localised developments within the reserve testify to the sustained valuing and continuing care of Canberra residents, evident in community-initiated improvements in interpretive trails to help tell the area's story.

10. Conclusion

We have looked across time at ways in which people have viewed and appreciated, used and valued the place we now call Black Mountain. Most of this time span is characterised by its presence as an imposing block of rock and bushland around which swirled the physical and economic activity of several phases of settlement. All the adjacent populations could and would make use of it, until it

⁶ http://www.nationalrockgarden.org.au/

became more and more confined and cut off from the people, just as the original Aboriginal settlers of the area had been gradually, then drastically, cut off from what sustained them physically and culturally.

Today, even topped with that highly controversial tower, Black Mountain remains what it has been for millennia — a landmark for navigation, a vantage point, a terrain that nourishes a surrounding population, and a storied landscape that has much to teach all of us about our place in time and space.

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