MUSIC OF THE CAVES: Cultural significance of sandstone caves in the Sydney Basin

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Abstract

Small caves are found throughout the onshore Sydney Basin, but an inventory of over 1,200 has only recently been compiled for the database of the Australian Speleological Federation Inc. Many caves, particularly those in the Blue Mountains have cultural significance for both Aboriginal and European inhabitants. Aboriginal sites have been studied for a century, but only a few academic researchers have studied the development of the caves and karst features, a team formerly at Wollongong University being particularly prominent. Several examples are given of the cultural significance of cave sites: for music, poetry, history, bushwalking, rock-climbing, bouldering and canyoning. As a group, the caves are of importance mostly for their association with human activity. Their scientific significance is less but some contain unusual features such as silicate and other deposits worthy of proper management.

People and Landscape

The onshore 36,000km² Sydney Basin comprises some of the planet's most spectacular landscapes, including World Heritage Areas which, however, gained that status primarily for their natural biological values. Many caves are found in either the Middle Triassic Hawkesbury Sandstone, or the Early Triassic Narrabeen Group of massive sandstones interbedded with claystones and shale, with a few unusual block-gliding caves in the Nowra Sasndtone south of the Shoalhaven River. Beyond the Cumberland Plain of Sydney's metropolitan area, outcrops of the first are dominant over most of the coastal zone and from the Southern Highlands district to ridges north of the Hawkesbury River, while the latter predominate in the upper Blue Mountains west of Woodford.

Most caves in the Hawkesbury and Narrabeen sandstones are similar in form and at least partly solutional in origin. In the Narrabeen Group caves are commonly associated with knickpoints, waterfalls and intercalated beds of claystone, and at least 40 or 50 are found in deep, narrow and often quite dark canyons, which in some cases are no more than a metre wide at base. The paucity and lenticular nature of such beds in the Hawkesbury Sandstone produces few canyons but simpler and still numerous caves.

Caves are scattered widely throughout the region, most being small, but over 1,200 are recorded as greater than 3m in length in the database of the Australian Speleological Federation Inc., the longest being 263m (Dunkley, in press). Their density varies considerably, from less than one per 100km², up to 3-4 per km². Most are clustered low in the landscape, beside or on mid-slopes above watercourses, some in the middle of the Sydney metropolitan area. The higher, usually drier sandstone ridges have few caves. A quarter of the Basin is almost uninhabited national park and declared wilderness, yet over 800 caves lie within at most a 30-minute drive and 20 minutes walking distance of the population (nearly 6 million people) in the heavily urbanised Newcastle - Sydney -Wollongong conurbation. Indeed many are in valleys within the metropolitan area. Although mostly small and only occasionally serving as a specific destination, they receive a great number of visitors.

Aboriginal sites have been studied for a century, and although a few academic studies of karst and caves have occurred (Johnson 1974; Wray 1993, 1995; Young et al. 2009 inter alia), these features are consistently underappreciated and underestimated in cave and karst literature and by natural and cultural heritage managers, as well as by recreational cavers, the last perhaps because their speleological pedigree is not recognised. The inventory includes about 114 sea caves, 20+ block-gliding caves, 40+ in narrow, deep and often dark canyons, 30-40 with unusual iron and silica concretions, and 2 stream caves. In addition, at least 200 contain evidence of Aboriginal occupation; 45 have white historical associations; 25 were used for a period as homes, mainly by destitute people in the last century; 30+ are camping caves used by bushwalkers; 20 are connected with bushranger legends; 20 are used for rock climbing and bouldering; 14 inspired poetry, music or art, and at least 10 or 20 contain glow worm populations.



FIGURE 1. Barralliers Cave, near Yerranderie, was used for shelter by Francis Barrallier during an attempt to cross the Blue Mountains in 1802

Aboriginal significance of caves

The oldest of over 150 Aboriginal occupation cave sites dates back at least 22,000 years, and a further 100+ have been identified which, by location, size and aspect are potential aboriginal sites. Most of these are located at altitudes of less than 400m. For a century after white settlement, passing scientists just observed and described Aboriginal people and their customs, taking little interest in their cave sites and less in prehistory. Nearly a century passed before serious studies were undertaken of cave art sites and properly documented and scientifically executed excavations were undertaken. Even then, much of the work was undertaken by professional polymaths from other fields such as geology (Edgeworth David), palaeontology (Robert Etheridge) and surveying (R.H. Mathews), the last of whom apparently studied 50 caves and 70 rock art sites. In recent years Australian archaeology has been revolutionised by many more qualified archaeologists, and intensive studies have been undertaken in restricted areas in military reserves and water catchment areas, aiding site conservation. Attenbrow (2002) provided a comprehensive review and descriptions of sites open to the public. Important caves continue to be identified in remote areas of Wollemi and other national parks and there are undoubtedly many more awaiting rediscovery.



FIGURE 2. Hangmans Cave WL478, near Wisemans Ferry

European perspectives and perceptions

First Fleet settlers recorded Aboriginal life in caves around Sydney Harbour from the day they arrived in January 1788. A few caves gained historical significance when recorded during the first attempts to cross the Blue Mountains, in one case (Barralliers Cave) settling a long debate about an explorer's route in 1802 (Dunkley 2002). About 20 are named after known or alleged early bushrangers, or in connection with other illegal activity such as stills and stolen goods. There are, for example, no less than 5 Donohoes Caves, named for the "Bold Jack" Donohue of musical legend, stretching from Epping through Parramatta to the Nepean River, The Oaks and Picton.

A kilometre north of Wisemans Ferry, legend relates that Hangmans Cave was used to despatch convicts. There is no evidence of this; the cave was probably used to store explosives or shelter guards during construction of the first Great North Road to Newcastle, but it's a good story.

A similar distance south of Wisemans Ferry with a great view, Courthouse Cave carries a legend that sittings of the local court were held there before a proper building was erected, and the sandstone has certainly been cut to allow seating. Authorities have installed measures to prevent it collapsing on to the road below.

For nearly a century places such as Kings Cave at Linden housed military guards, road gangs, railway and other itinerant builders and workers. Nearby are small caves used for storing supplies and explosives (not for prisons as sometimes stated).

Otherwise, during and after the convict era, for many years the sandstone around Sydney became country to be hurried across rather than settled.

Partly as the result of gold rushes, by the 1880s Australia was a wealthy country and railways began to deliver tourists to these wild landscapes. Over the next 50 years landowners, hotel entrepreneurs and local councils constructed walking tracks totalling 300km in length to pleasant sights (Smith 1999), including numerous small caves which in turn acquired romantic, fanciful and feminine names, and which appeared on postcards and souvenir books. Prime examples of names include Lovers Nook, True Lovers, Bride and Bridegroom, Honeymoon, various Fairies of indeterminate gender, a Mermaid, and one cave each for Annie, Eveline, Minnie, Maxine, Vera, Hilda, Alice Louisa, Claire and Marguerite. There's also a Wedlock but no Separation or Divorce Cave!

The Modern Era: walkers, adventurers and artists

The early reservation of sites such as Mermaids Cave at Blackheath in 1882 began a period during which, eventually, nearly all sandstone caves in the region would remain in public ownership. After 1935 many such sites were forgotten or neglected, but most trails have survived and many rehabilitated because the more rugged land became incorporated into public reserves and later national parks.

Often with constructed windbreaks and levelled floors, over 30 caves are known to have been used for bush camping by walkers and climbers, and most still are, especially in rugged country more than a day's walk from roads. Attic, Dadder and Word Caves in the Blue Labyrinth south of Glenbrook were early examples. Most, however, are found in the remote long-distance walking country south of Katoomba, extending from Narrow Neck to Kanangra Walls and further to the Kowmung River and Yerranderie. The largest such as Hundred Man and Thousand Man Caves reflect their capacity. Some caves (Darks, Walford, Rookery Nook and Professor Eds, along with several in Royal and Kuring-gai National Parks) were appropriated as weekend and holiday retreats by walkers, fishermen and others, and partly as a result have in-



FIGURE 3. Pumping Station Cave WL681, Katoomba was a popular bushwalkers' camping cave

spired works by writers, poets, artists and musicians. A number (including some sea caves) were used as permanent homes by recluses and the indigent around metropolitan Sydney, especially in the early 20th century and during depression years. As recently as 2011 inhabitants of several caves in Royal National Park on the southern outskirts of the city were removed by authorities.

In recent decades the sports of bouldering, rock-climbing, and canyoning have flourished throughout the region, the first mostly in the metropolitan area, the other two especially



FIGURE 4. A small bouldering cave near North Rocks

in the upper Blue Mountains, where at least 20 caves are used by climbers, some with fixed routes. Commercial operators are active at Blackheath, Mt Boyce and especially at Mt York where a well-built stairway accessing climbing caves was built mainly from commercial donations. Caves in the splendid deep and narrow canyons are less frequented and more robust because of regular flooding, but several are photographically spectacular and a number have lengthy dark sections. Some are utilised for training by cavers.

A few such as Lourdes Grotto near Springwood have religious and spiritual connections, and quite a number have proved to be the last living spaces of both white and black people. Others have been inspirational to artists, poets, writers and musicians.

While living in Lithgow, Henry Lawson wrote a little poetry entitled "On the Summit of Mt Clarence" about a hermit living in a cave there.

In a cave among the ridges, where the scrub is tall and thick, with no human being near near him, dwells a wretched lunatic ...

There is a Henry Lawson Cave in suburban Sydney, in Willoughby, with small tiered seating outside the cave where occasional readings of his and other poetry is held.

In 1929 F.C.Meyer wrote a dozen pieces of doggerel celebrating caves at Jenolan and in the Blue Mountains, including Coxs, York, Hildas Grotto, Lyre Bird Dell, Walls, Ross, Bushrangers and Engineers Cascade Caves. The European heritage of Emu Cave on the Bell Road has also enjoyed some unremarkable poetry, but something better was penned about Baiame and Bull Caves.

In the 1940s author Eleanor Dark formed a Music Club for local residents starved of good music, arranging for performers from the Sydney Conservatorium to visit. Some may have been performed in Darks Cave, which is fairly remote, and it is there also that she apparently wrote parts of her trilogy "The Timeless Land", a best-seller in 1950s Australia. This cave was also a kind of spiritual home for adventure activities in the district, for Eric Dark was an avid outdoors enthusiast



FIGURE 5. Henry Lawson Cave WL115, in Willoughby, used for occasional poetry readings

who pioneered the sport of rock-climbing in the Blue Mountains. Local legend was that in World War 2, the Darks were provisioning their cave against a Japanese invasion (they actually were in civil defence), and in the McCarthyist era some thought they were closet communists.

It was certainly from numerous visits here that a close friend of the Darks and one who clearly shared their humanistic philosophy and love of the outdoors, received much of his artistic inspiration. Much later in life, in 1999 William Holland composed his descriptive music for Darks Cave, the first public playing of a recording of which occurred at the ASF Conference at Galong in 2013. Scored for soprano, bass baritone, piano, choir and orchestra, it has three thematic movements: 'Nature and the Aborigines', 'Katoomba', and 'The Cave'.

Darks Cave is a shelter and a refuge – quiet place to think Far away from distractions and pressures – to newly look at life While there are many such caves – they are sometimes hard to find Other things too, like music and words can refresh and the spirit renews

In 2004 Holland went on to compose 'Walls Cave', a onemovement, 11m40s piece for orchestra.

Overall, the most frequently visited caves are in the upper Blue Mountains, from Wentworth Falls to Lithgow and Newnes. It appears possible that, however fleetingly, more people visit the sandstone caves in the Sydney and Blue Mountains Region than all the state's show caves combined.

Significance, Conservation and Management

Most caves are quite robust and have survived well, some having been used by humans for thousands of years, although evidence is that Aboriginal occupation did hasten deterioration of caves and art sites. Their location in the more rugged terrain along and on the steep slopes above water courses rather than on ridge tops also contributed to survival. Intensive research has concentrated on Aboriginal sites, such as that relating to survival of cave art sites (Hughes 1978). Many sensitive Aboriginal sites are protected primarily by lack of publicity and/or by their location in military and water catchment or remote and rugged areas; however a few close to urban settlement have suffered inexcusable vandalism. Some protective measures are now in place. Caves with aesthetically pleasing, thin protruding bedrock plates are vulnerable, and no additional protective measures have been provided; the same applies to those with unusual or rare mineral The greatest environmental pressure comes depositions. from urban development which has concentrated run-off and thus flooding, sedimentation, pollution, infiltration of garden and other chemicals, and has increased graffiti. Although improvements have occurred in the last few years, geoheritage has not rated highly in the priorities of public management authorities, and important landscapes such as those of Gardens of Stone National Park have not been adequately studied.

The European heritage of these caves has been little appreciated, and evidence is retained largely through historical and a few heritage studies. The caves are worth celebrating primarily for their association with human life and endeavour, in other words, for their intangible cultural and heritage value. Their scientific significance is less although some contain unusual features and deposits worthy of further research and proper conservation measures.

Their location in National Parks diminishes the likelihood of maintaining links with their European heritage, and in time perhaps little will remain to remind us beyond some music, poetry, some old books and reports, and a few interpretation signs.

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