

## AUSTRALIAN CAVES SINCE 1800

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### INTRODUCTION

This paper examines the history of white Australian interest in caves. By way of introduction, it is important to note that Aboriginal Australians had a long and intimate association with many caves as shelters, sacred sites, sources of flint and the like. This aspect of cave history has been comprehensively summarised by Jennings (1979) and does not need further review here.

Previous attention to the history of Australian caves has largely focused upon specific caves or regions. Some important examples include Havard's work on Jenolan (1934), the Lane & Richards (1963) monographic study of Wellington, the early history of Bungonia Caves by the Whaites (1972), and Elliott's paper on Yanchep (1977). The Jenolan Caves Historical and Preservation Society, established in 1972, has provided a locus for continuing examination of the history of this one cave area, but no other organised attempt to foster an interest in cave history has developed elsewhere in Australia. Only Lane (1975) has attempted an historical examination which spans a number of areas, and even this account is confined to Central New South Wales.

However, these studies, together with fragmentary information on other areas, enable some overview to be attempted here. Hopefully, this will draw attention to the value of an historical perspective on current issues, and also encourage further recording of the history of our caves.

### FIRST DISCOVERIES

There is little information about early cave discoveries. It is hard to believe that some of the early maritime explorers of the coastline failed to notice, or perhaps even enter, some of the larger sea caves around the Australian coast. Certainly, in 1803, Baudin's expedition entered the Ravine des Casoars on the West Coast of Kangaroo Island and visited at least some of the caves. It is even argued that some of the graffiti in these caves is the work of his crew.

The first settlers at Sydney Cove found their problems and privations exacerbated by the absence of any limestone from which mortar might be produced. This problem was initially solved by Paterson's discovery of limestone in the vicinity of Port Dalrymple at the mouth of the Tamar River in 1804. Lime was then shipped to the growing settlement at Sydney, and a cynic might say that the pattern of Australian attitudes to mineral resources was established at that point. However, the reality is not as simple as that.

In 1815, the Walli limestone was reported by George William Evans and this seems to be the first report of limestone on the mainland. Oxley discovered the Wellington valley in 1817, and in 1818 reported upon its limestone deposits. The first report of a cave appears to be an item in the Sydney Gazette of 1821, although the identity of the cave

concerned is unclear. The Bungonia limestones were known shortly afterwards, and the first documented account of cave entry appears to be Allan Cunningham's visit to the Drum at Bungonia in 1824. Thus, between 1815 and 1830, a number of New South Wales caves and limestone areas were known (Lane 1975).

In 1830, George Ranken discovered fossil bones in the Wellington Caves. Following this, Major Thomas Mitchell visited the caves and collected a number of specimens. These were studied and reported upon by various European scientists, particularly Richard Owen, and laid the foundation of Australian palaeontology (Lane and Richards 1963). It is also reasonable to suggest that these caves provided the beginning of a scientific interest in Australian caves.

### CAVE TOURISM AND PROTECTION

In 1828 John Oxley reported the discovery of caves at Wombeyan, N.S.W. and in 1838, James Whalen discovered what are now known as the Jenolan Caves. These two discoveries led over some years to the development of cave tourism, a major concern for cave protection and an unprecedented governmental interest in cave exploration. Wombeyan Caves Reserve was gazetted in 1865 and Jenolan (then known as Binda or Fish River Caves) in 1866. These were among the first wildland reserves in Australia, and an indication of their historic place can be gained from the fact that the world's first national park (Yellowstone, U.S.A.) was not proclaimed until 1872 and Australia's first national park not until 1879. Further, this seems to have been the first instance in the world of cave areas being formally reserved by government. Others rapidly followed in N.S.W.: Timor in 1867, Bungonia in 1872, Yarrangobilly in 1879, Wellington in 1884, Abercrombie in 1889 and some others.

Oliver Trickett was engaged by the government of the colony to search for, survey and report upon caves. He succeeded in locating a relatively high proportion of the caves known even to this day, mapped a considerable number at Jenolan, Wombeyan, Yarrangobilly, Wellington, Bungonia and Abercrombie. Although a number of equivalent appointments were made in other States, detailed below, none of the appointees demonstrated such energy or left such thorough records of their work.

Although one can argue that this interest in caves was motivated solely by the embryonic development of tourism, there does appear to be some evidence of a beginning appreciation of the intrinsic value of caves in themselves — an appreciation which no government has demonstrated in the present century. More thorough research might well seek to elucidate this issue, for instance, by perusing the records of the N.S.W. Caves and Rivers Committee. Meanwhile, exploration continued, particularly by Wilson and Wiburd at Jenolan, and thousands of tourists visited the caves each year. New South Wales (particularly Jenolan) can probably claim a number of innovations during this period. A Caves Protection Act was established in 1872; Jenolan was first lit (experimentally) by electricity in 1880 and permanent electric lighting installed in 1887; Samuel Cook's book, 'Australian Wonderland' (1889) was not only a remarkably early example of what we would now call a 'coffee table' book, but one of the first to use cave photographs throughout. Shaw (1979) says "this was the very first time that such photographs, taken underground, had been used as book illustrations, printed by conventional means on ordinary paper". (Note: On presenting this paper, Dr Guy Cox

reported that at least one cave photograph had been published in a book prior to this date).

Meanwhile, similar developments were occurring in other States. In 1862, Rev. J.E. Woods published his "Geological Observations in South Australia", in which he described, *inter alia*, many of the caves in the South-East of South Australia. Two aspects of his work are of special interest. The first is that by the time of his book, a number of the caves were well-known and frequently visited; secondly, his views on such matters as cave genesis and hydrology, based upon his own observations, were remarkably in advance of his contemporaries, and even of many more recent geologists.

Although the Naracoorte Caves were formally reserved some ten years later, it was not until 1885 that a resident manager was appointed, actually as a district forester but with explicit responsibility for the care and protection of the caves. The second incumbent of this position, William Reddan, arrived in 1886 and gave particular attention to the caves. In 1893, he was granted funds to employ six men to assist in the search for caves and in their subsequent development. One of these, James Mason, was of particular energy and his name or initials are found in many caves which are difficult of access. Both the Victoria and Alexandra Caves were discovered by Reddan and his team during this era and opened to the public. In 1915, management of the caves area was handed over to the Tourist Bureau and Reddan relinquished his post with the Forests Department in order to stay with the caves, resigning his position in 1919. Regrettably, the manuscript records of his tenure at the caves have been lost, and little is now known of his extensive exploration activities.

In Western Australia caves were known in the 1840s but it was late in the nineteenth century when Tim Connelly and Edward Dawson, landowners in the South-West, discovered particularly attractive caves and opened these to public visits. In 1900, the government sent surveyor Marmaduke Terry to investigate the caves of the region. A caves committee (later Board) was established and Caves House, Yallingup was built. At the peak of the Board's activities, they were able to offer a tour, lasting several days, in which a total of 13 caves were visited.

Other States generally followed somewhat later. In Victoria, following a report by Kitson (1907), the Buchan Caves reserves were proclaimed in 1901–4. Frank Moon was appointed and charged with the responsibility of searching for and developing caves. Among those which he discovered were the present show caves — Royal Cave and Fairy Cave. Tasmania has a complex and diverse history in the management and conservation of its caves, well summarised by Kiernan (1974) and Middleton (1977). However, given the State's generally cavalier attitude to natural resources, it is significant for present purposes that a variety of cave reserves have been established since 1894, and that more important new cave reserves have been proclaimed during the last 10 years than in any other State. Queensland seems to have a somewhat different history — Chillagoe Caves were discovered by the Atherton family and their employees in the 1880s (Robinson 1976) and although tourists were conducted through a number of the caves for many years, this was abandoned, the caves almost forgotten by the outside world, and only re-opened, largely as a result of the efforts and perseverance of Vince Kinnear, in the 1960s. At Rockhampton, John Olsen arrived from Norway in 1882, discovered the cave which bears his name and in 1884 he obtained freehold ownership of the surrounding

land and the cave has been managed by the family since that time, the present manager being his great-grandson, Rod Olsen (Olsen 1979).

In summary, Australia in the later part of the 19th century and early 20th century saw an immense interest in caves, coupled with a ready acceptance of governmental responsibility for their protection. Australia at that time led the world in its recognition of caves as a natural resource to be held in public trust, devoted more public funds to cave exploration and study than any other nation, and held its own in the quality of both cave studies and cave management.

## THE GREAT FORGETTING

This position changed markedly following World War I, and caves commanded little public attention or action for many years. Occasionally new discoveries of some note occurred, and new show caves were in fact opened at Kelly Hill, South Australia (1926), Tantanoola, South Australia (1930) and at Hastings and Gunns Plains, Tasmania (1939). Perhaps the most important exploration was that commenced by Rev. George Woolf and continued by Captain J. Maitland Thompson in the great caves of the Nullarbor Plain. Regrettably, their work was not fully recorded, but Thompson passed on to later generations of speleologists something of his immense knowledge and so laid the foundation for modern exploration of the Nullarbor (Dunkley 1967).

Another important element was the exploitation of guano deposits in the caves of Western Australia and Queensland. Johannsen's Cave in Central Queensland was one which was opened up by this mining and it was then used as a munitions store during World War II. Associated with this, caves on the nearby Mt. Etna were then used as a secret training area by the Z special unit of the Australian commando regiment, where troops were trained, under the direction of Captain S.W. Carey, to fight underground. They were being prepared for the campaign to drive the Japanese army from the Pacific area, where they had developed underground bases in the caves which riddle most islands of the region (Caffyn 1970).

It is probably no coincidence that in 1946 Carey, by then Professor of Geology at the University of Tasmania, convened a meeting in Hobart which resulted in the establishment of Australia's first speleological society — the Tasmanian Caverneering Club. Gradually other groups, often inspired and informed by the Tasmanians, formed elsewhere in Australia, but there was little contact between them and for a time, relatively little in the way of new discovery. The groups in New South Wales, for instance, spent much of their time re-tracing the steps of Trickett. However, new techniques were gradually adopted — wire ladders in 1950 and the scaling pole in 1952. The latter was based upon a report of a French expedition, and like much early equipment development in this country, was designed and constructed by John Bonwick of the Sydney Speleological Society. The same year saw the beginning of cave diving, using a war disposals gas mask, a length of garden hose and a foot pump! Rather remarkably, the diver survived, and more adequate equipment was gradually adopted, but then diving came to a virtual halt in the early 1960s.

In December 1953, Brian O'Brien, then president of the Sydney University Speleological Society, was lost in East Deep Creek Cave at Yarrangobilly in New South Wales for 74 hours but was found after a massive search. This incident, not surprisingly, impressed

upon O'Brien the potential value of greater liaison and co-operation between cavers and he began arguing the case for an Australian Speleological Federation. As a result, a conference was convened in South Australia, the Federation was established, and then 62 people departed for the first of a new generation of Nullarbor expeditions. Although the Federation has since ebbed and flowed, and has enjoyed its share of critics, there can be little doubt that it has greatly facilitated the development of speleology in Australia, even if mainly through established Australia-wide liaison.

## RENAISSANCE ??

The last 25 years have seen an immense boom in cave exploration and study. Extensive books and reports have been published on many cave areas; many hundreds of new caves, some of great beauty or great scientific interest, have been discovered; new techniques have been developed, and Australians can lead or hold their own on a world level in such specialisations as single rope techniques (Montgomery 1977) or cave diving (Lewis and Stace 1980); one could continue in such a tone for quite a while.

There has certainly been a great increase of interest in cave management and protection, at least in part aided and abetted by the Federation but also by many government officers and especially by the Australian Heritage Commission. Again, in conceptualisation of cave conservation and management issues, and in adequate management planning, we can feel confident that we hold our own on a world level.

Regrettably, this is not a cause for complacency. Although some very important and often very beautiful new caves have been discovered, many remain unprotected and at least a number have suffered marked despoliation. Some long-known caves have been destroyed; others are likely to be. Bat populations are in rapid decline; some cave invertebrates have suffered a similar fate. We are a very long way short of the level of public and in particular governmental interest of the late 19th century. A renaissance in caving will only be achieved when we regain an equivalent level of public acceptance of responsibility for cave protection.

## REFERENCES

- Caffyn, P.C. (1970) Historical outline of mining, recreation and conservation activities at Mt. Etna and Limestone Ridge. In: Sprent, J.K. (ed.) *Mt. Etna Caves*. University of Queensland Speleological Society.
- Cook, Samuel (1889) *The Jenolan Caves: an excursion to Australian Wonderland*. London: Eyre and Spottiswoode.
- Dunkley, J.R. (1967) The geographical and historical background. In: Dunkley, J.R., and T.M.L. Wigley (eds.) *Caves of the Nullarbor*. Sydney: Speleological Research Council, pp. 1-12
- Elliot, Ian (1977) The discovery and exploration of the Yanchep caves. Text of address given to Royal Historical Society of Western Australia.
- Havard, Ward L. (1934) The romance of Jenolan Caves. *J. Proc. Roy. Aust. Hist. Soc.*, 20(1): 18-65
- Jennings, J.N. (1979) Man and other animals in Australian caves and shelters: a review. *Trans. British Cave Res. Assoc.* 6: 93-130

- Kiernan, K. (1974) A critical examination of Tasmania's cave reserves. *Southern Caver* 6(2): 3-25.
- Kitson, A.E. (1907) Proposed reservation of limestone caves in the Buchan district. Eastern Gippsland. *Recs. Geol. Surv. Vict.* 2(1): 37-44.
- Lane, E.A. (1975) Lime, limestone and the first caves. *Aust. Nat. Hist.* 18: 190-5.
- Lane, E.A. and Richards, A.M. (1963) The discovery, exploration and scientific investigation of the Wellington Caves, New South Wales. *Helictite* 2(1): 3-53
- Lewis, Ian and Stace, Peter (1980) *Cave Diving in Australia*. Adelaide: Ian Lewis.
- Middleton, G.J. (1977) The Management of Tasmania's Caves. *Cave Management in Australia II*: 39-48
- Montgomery, Neil R. (1977) *Single Rope Techniques*. Sydney Speleological Society.
- Olsen, T. (1979) *A history of Olsen's Caves*. Olsen's Caves.
- Robinson, T. (1976) Chillagoe's first speleo. *Tower-Karst* 1:46
- Shaw, T.R. (1979) *History of Cave Science*. Crymych: Oldham.
- Whaite, J.L. and T.M. (1972) Early visitors and explorers at Bungonia Caves., in *Bungonia Caves*, Sydney Speleological Society, pp. 6-10.
- Woods, Rev. J.E. (1862) *Geological Observations in South Australia, principally in the district south-east of Adelaide*. Longman, Green, Longman, Roberts and Green, London.