

New evidence confirms Thomas Hannay as the first photographer of Naracoorte Caves and emphasises the importance of historical writing in caves



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Abstract

Naracoorte Caves National Park in South Australia is a UNESCO World Heritage site renowned for its Quaternary vertebrate fossil record spanning the past 500,000 years. Although the primary heritage values of the park relate to the fossil deposits, significant other values include biological, geological, cultural and historical aspects. In 1860, the Reverend Julian Tenison-Woods commissioned a series of photographs of Blanche Cave for use by the engraver Alexander Burkitt in illustrating Woods' 1862 book *Geological observations in South Australia*. The identity of the photographer was unknown until recently, when we discovered an engraving in a Melbourne periodical that cited Thomas Hannay of Maldon as the producer of the photo. Despite this breakthrough, there was no direct evidence linking Hannay to Naracoorte Caves. In May 2018, we discovered an inscription on the wall of Blanche Cave that can be attributed to Thomas Hannay, providing evidence of the photographer's visit to the caves. This inscription highlights the importance of historical writing in caves as primary information for historical research. In this paper we present background information on the 1860 Hannay photographs of Naracoorte Caves and describe the inscription found in Blanche Cave. We also discuss the historical value of cave inscriptions and the issues relating to cave restoration projects that involve removal of 'graffiti'.

Key words: Naracoorte Caves, Thomas Hannay, cave photography, Julian Tenison-Woods, Alexander Burkitt, historical graffiti, cave conservation

The Naracoorte Caves

Naracoorte Caves National Park, in the south-east region of South Australia, is renowned for its vast deposits of Quaternary vertebrate fossils spanning the past 500,000 years (Reed & Bourne 2000). The global significance of the park's palaeontological values was formally recognised in 1994 with inscription on the UNESCO World Heritage list as the Australian Fossil Mammal Sites (Riversleigh/Naracoorte). A serial nomination with Riversleigh in north-west Queensland, the two localities contain rich fossil records that document the evolution and palaeoecology of Australia's mammal faunas spanning more than 20 million years (Reed & Bourne 2009).

Originally known as the Mosquito Plains Caves, the Naracoorte Caves were first recorded by European settlers in 1845 and subsequently became popular attractions for the local community and visitors to the district (Hamilton-Smith 1986; Reed & Bourne 2013). Prior to 1885, access to

the caves was unrestricted, leading to damage and degradation of the large and easily accessed caves such as Blanche Cave. By the late 1860s, several authors reported that the caves were in a degraded state due to specimen hunting, social activities and graffiti (Reed & Bourne 2013). The caves were further damaged during the mining of bat guano in the 1870s.

An article describing a visit to the South East district by the Select Committee to enquire into draining works in Victoria documents the presence of graffiti in Blanche Cave:

The Blanche Caves may fairly be considered one of the natural wonders of South Australia, although they have been greatly denuded of their pristine beauty by the characteristic destructiveness of tourists. Nearly every stalactite in the caves has been carried off, and several stalagmites – in wanton mischief it must have been done – have been thrown down. Indeed, parodying Byron's well-known lines it may be aptly said :– “Man's defacing fingers have swept the lines where beauty lingers.

Hannay: Narracorte photographer

The ceilings have been cleared of every stalactite, and some visitors have still further disfigured the caves by tracing in the roof, with the smoke of a candle, their names or initials. It seems almost a pity that some steps cannot be taken to preserve these caves from injury by mischievous visitors, for they must be numbered among the very few natural wonders of which as a colony we can boast. (The South Australian Chronicle and Weekly Mail, Saturday 20 April 1872, p.12.)

In 1876, the land surrounding the caves became the responsibility of the Forest Board and was designated as the Cave Range Forest Reserve. During Governor Sir William Jervois' visit in 1880, local citizens relayed concerns regarding the state of the caves and pressure increased for formal protection (Hamilton-Smith 1986). In 1885, 50 acres surrounding the caves was set aside as a reserve and the caretaker Daniel Battams appointed to care for the caves and oversee visitors. This marked the beginning of formal tourism to the park, with a fee recovered from visitors to assist with development and protection of the caves.

Today, the park is a major tourist attraction, scientific research locality and holds three levels of heritage listing including State Heritage (1986 and 2016), National Heritage (2007) and World Heritage (1994). Although the primary significance of the Naracoorte Caves is their palaeontological record,

the various heritage listings reflect the many other important aspects of the caves including geological, biological, cultural and historical values.

Naracoorte's caves have inspired photographers for over 150 years. Early photographs provide insight into the condition of some caves prior to development and reflect the activities of significant historical figures related to the caves (Reed & Bourne 2013; Reed 2016). In 1860, three photographs of Blanche Cave were produced by a photographer who until recently remained unidentified. New research suggests the unknown photographer was Mr Thomas Hannay of Maldon in Victoria (Reed 2016). However, despite this breakthrough there was no direct, physical evidence connecting him to the Naracoorte Caves. Here we present new evidence directly linking Thomas Hannay to Blanche Cave and confirming his presence at the site.

Thomas Hannay – first photographer of Naracoorte Caves

A set of three photographs produced in 1860 (Figures 1, 2 & 3), portray scenes from the second and third roof window entrances of Blanche Cave at Naracoorte (Figures 4 & 5). Held in the collection of the State Library of South Australia (B36858,

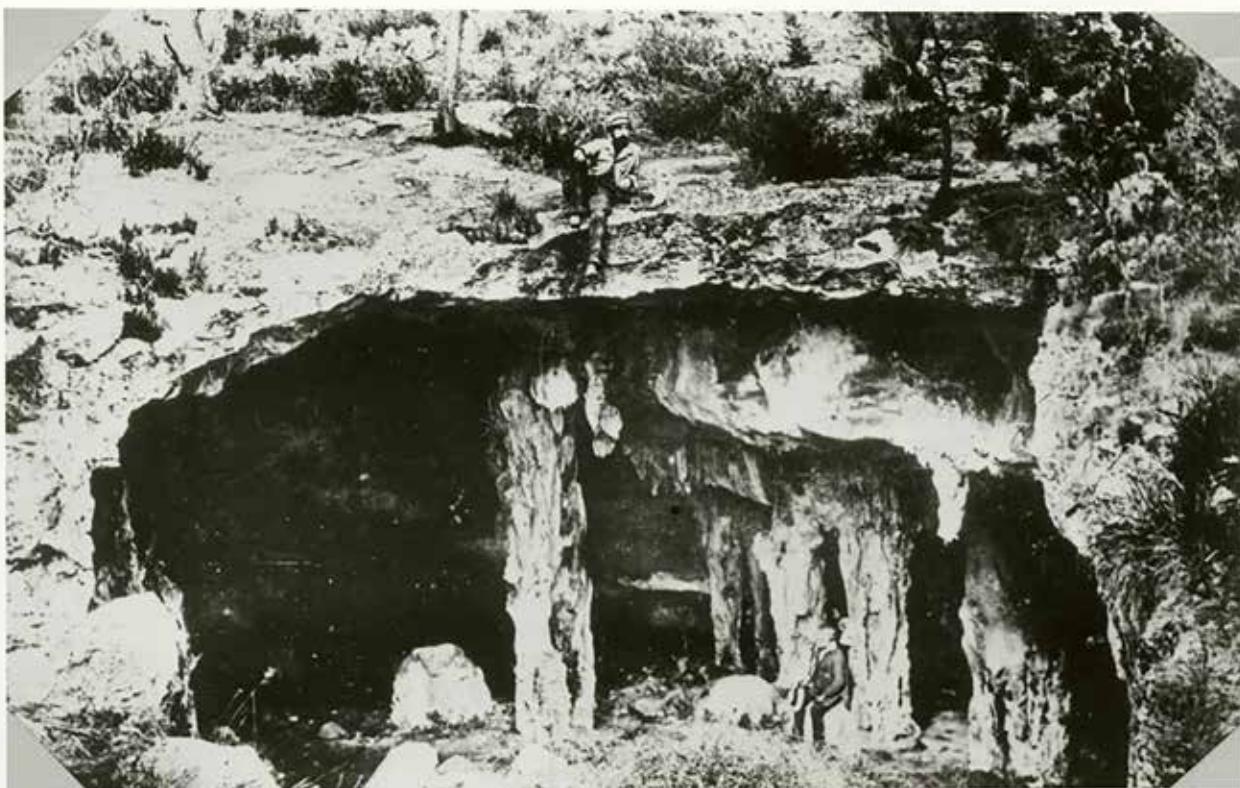


Figure 1. Blanche Cave, 1860, second roof window entrance. Julian Tenison-Woods seated above cave. Photographer: Thomas Hannay. State Library of South Australia, B36858.

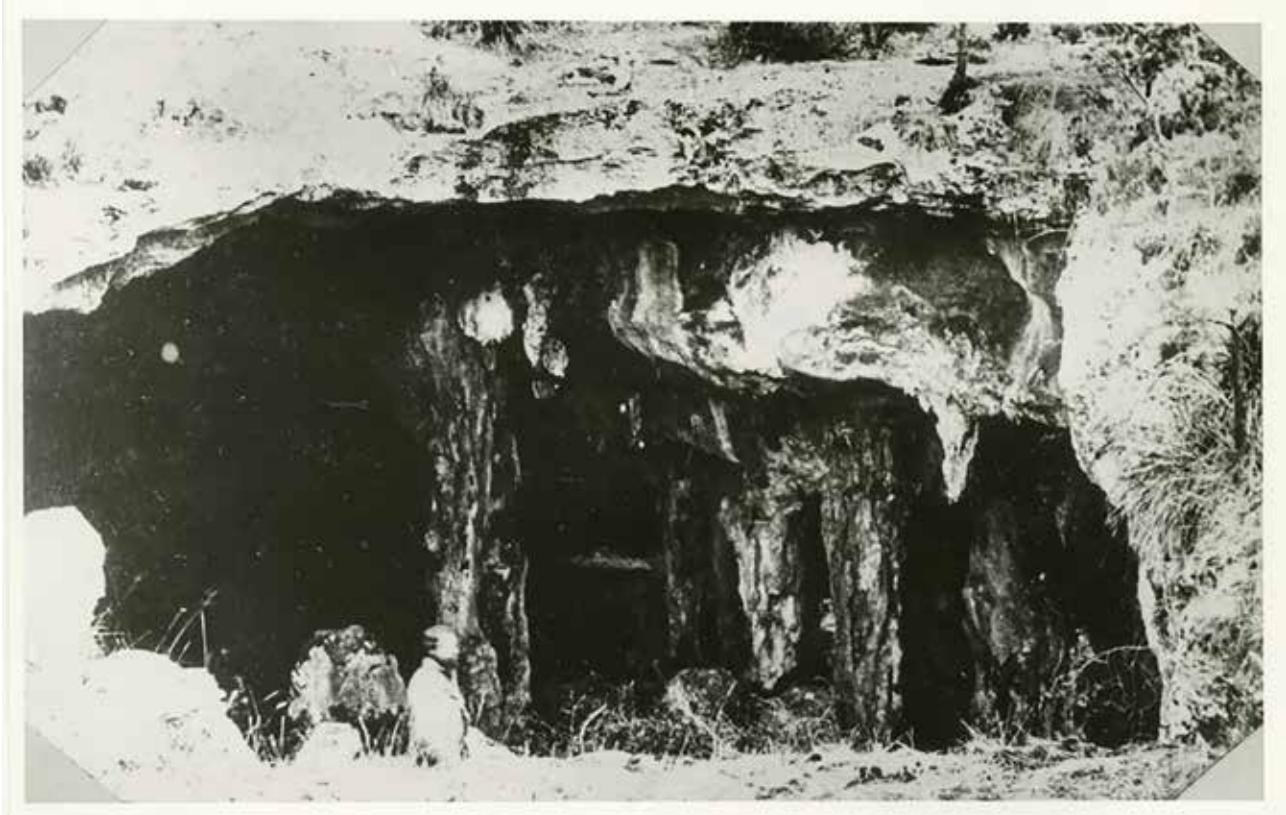


Figure 2. Blanche Cave, 1860, second roof window entrance. Julian Tenison-Woods figured.
Photographer: Thomas Hannay. State Library of South Australia, B36859.

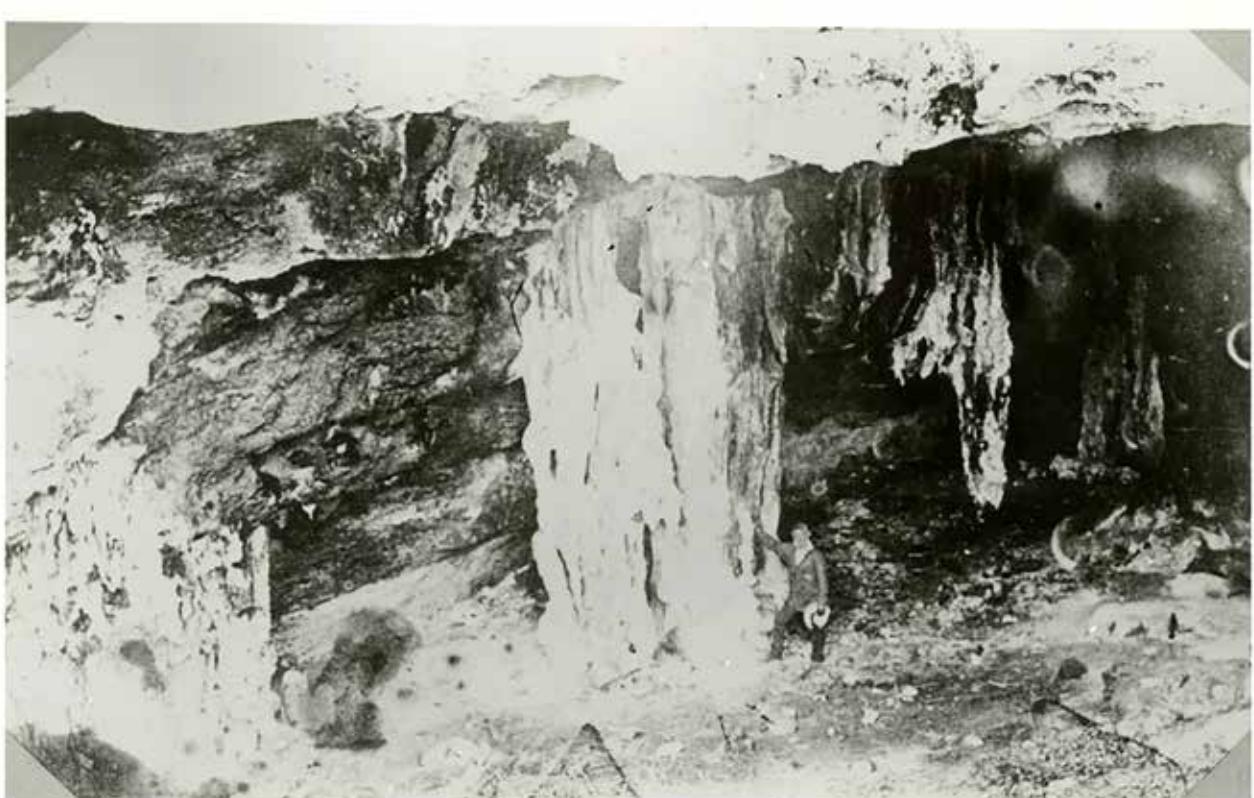


Figure 3. Blanche Cave, 1860, third roof window entrance.
Photographer: Thomas Hannay. State Library of South Australia, B36860.

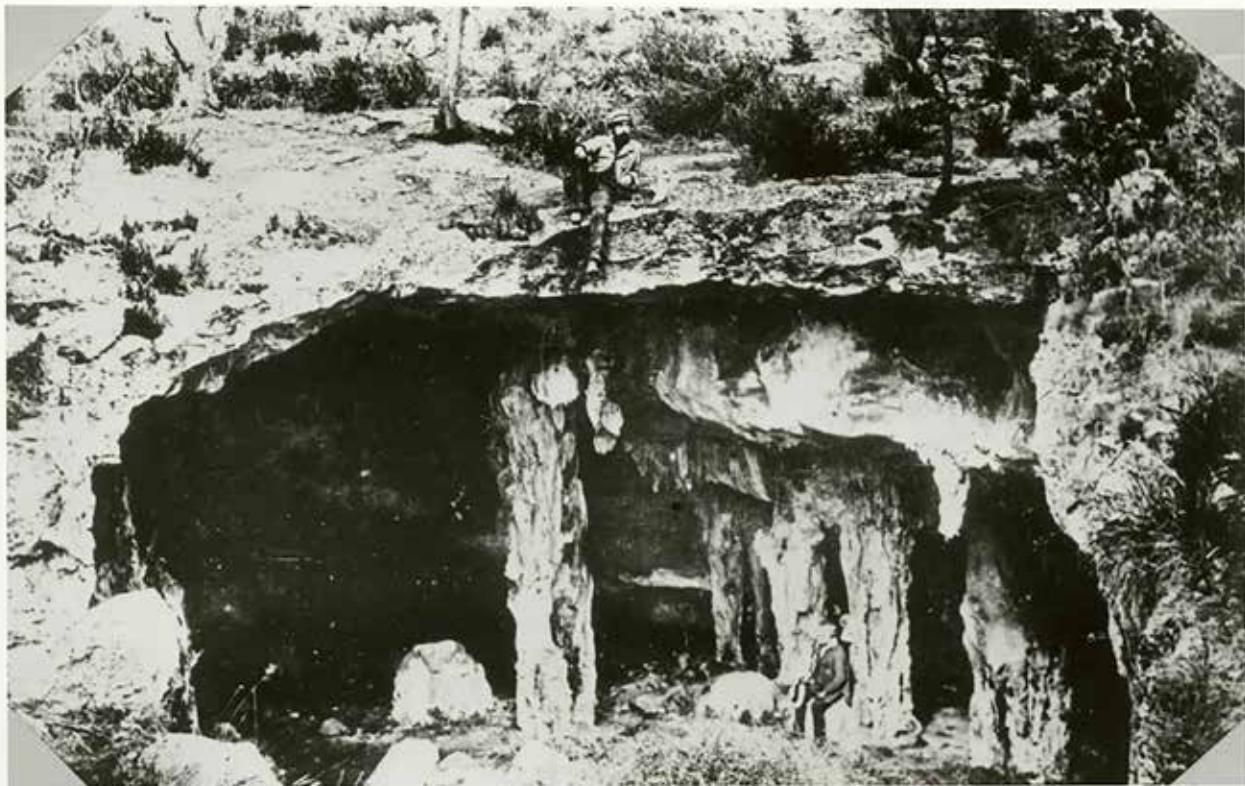


Figure 4. Blanche Cave second roof window entrance.

Above – 1860 photograph by Thomas Hannay. State Library of South Australia, B36858.

Below – 2018 photograph by the authors.

Note the presence of a stone wall, which was constructed sometime after 1885.

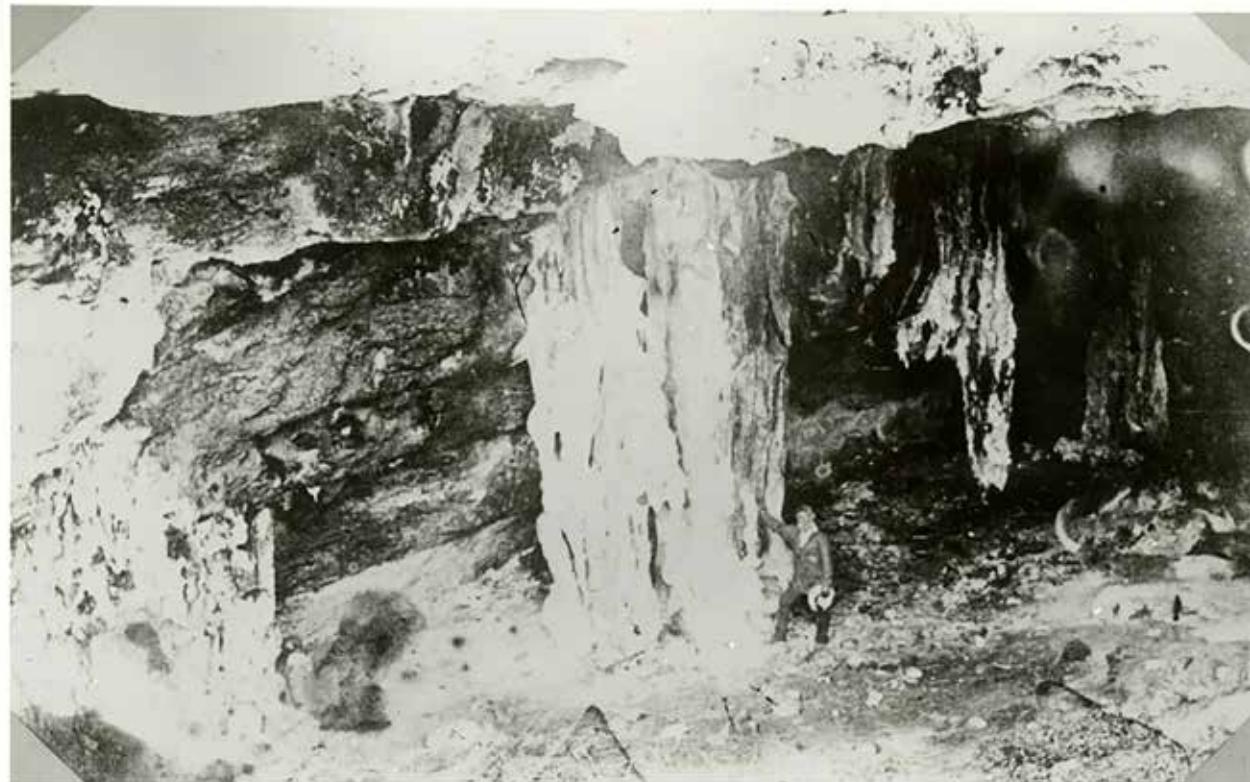


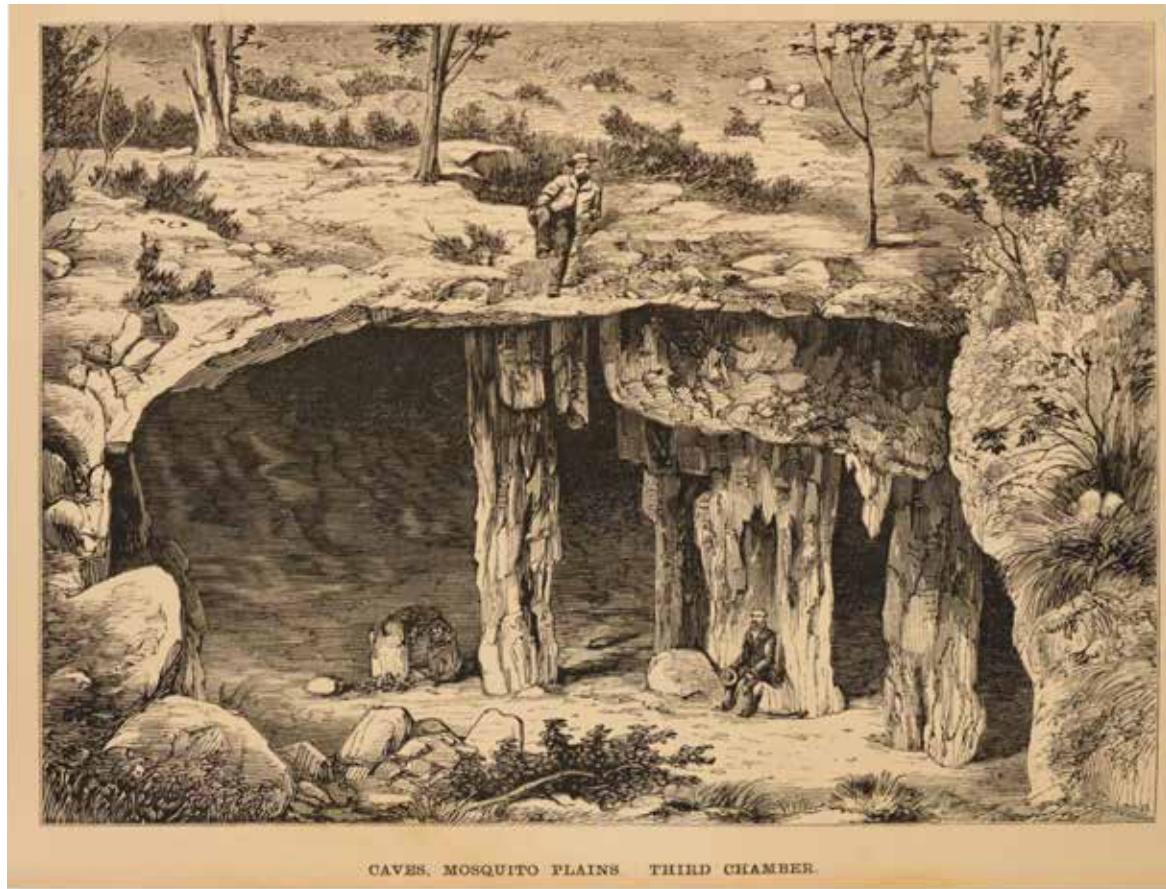
Figure 5. Blanche Cave third roof window entrance.

Above – 1860 photograph by Thomas Hannay. State Library of South Australia, B36860.
Below – 2018 photograph by the authors.

B36859 and B36860¹), the photographs are significant for their association with the Reverend Julian

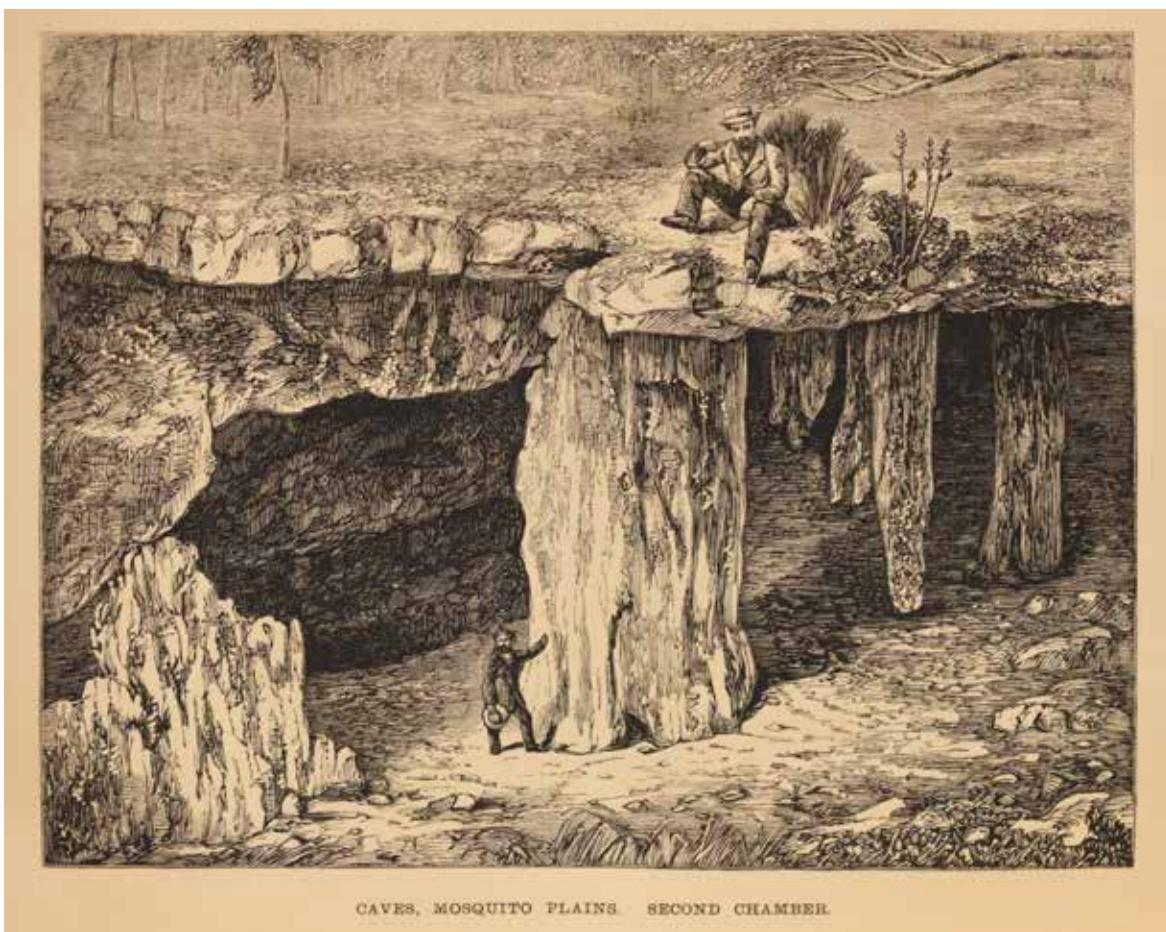
¹ Additional photographs held in the collection of the State Library of South Australia (SSLA) show various scenes of Naracoorte and surrounds from 1860/1861 (SSLA B36862, B36864 to B36867). They have the same album mounting as the Hannay photographs and may be attributable to him. The style and subject matter reflect other examples of his work.

Tenison-Woods who appears in two of the images (Reed 2016). Indeed, Woods commissioned the photographs to be used by artist Alexander Burkitt to produce engravings for the book ‘Geological observations in South Australia: Principally in the district South-East of Adelaide’ (Figures 6 & 7; Woods 1862; Hamilton-Smith 1997). Woods is



CAVES, MOSQUITO PLAINS THIRD CHAMBER.

Figure 6. "Caves of Mosquito Plains Third Chamber", woodcut by Alexander Burkitt; photographed from original plate in Woods (1862).



CAVES, MOSQUITO PLAINS SECOND CHAMBER.

Figure 7. "Caves of Mosquito Plains Second Chamber", woodcut by Alexander Burkitt; photographed from original plate in Woods (1862).

pictured conspicuously sitting on the edge of the cave entrance in one photograph (Figure 1) and standing inside the cave in another (Figure 2). The third image shows the view from above the third roof window entrance (Figure 3) and includes an unknown gentleman who is also seen in another of the photographs (Figure 1). It is possible that this man is Alexander Burkitt as he was known to travel with Woods during the preparation of the book.

Hamilton-Smith (1997) noted the association between Woods and Burkitt, but was unaware of the identity of the photographer who produced the three images:

The remarkable Father Julian Tenison Woods had three photographs taken of the Blanche Caves

at Naracoorte in South Australia. These were then used as the basis of Burkitt's illustrations in Woods' 1862 monograph *Geological Observations in South Australia*. Although copies of the photographs exist, the location of any original prints is unknown, and the identity of the photographer similarly remains a mystery. It may have been Burkitt himself, or perhaps one of the itinerant photographers who toured regional areas at the time.

A story titled "The Mosquito Plains Caves" appeared in an 1862 periodical (*The Leader: a weekly journal of news, politics, literature and art*, 22 March 1862, V. 10, No. 325: 1). It was accompanied by an engraving depicting a scene from one of the 1860 photographs of Blanche Cave (Figure 8; also compare Figure 1). This



THE MOSQUITO PLAINS CAVES.
FROM A PHOTOGRAPH BY THOMAS HANNAY, MALDON.

Figure 8. "The Mosquito Plains Caves. From a photograph by Thomas Hannay, Maldon". *The Leader: a weekly journal of news, politics, literature and art* (Melbourne), 22 March 1862, Vol. 10, No. 325, p. 1

Hannay: Narracorte photographer

engraving has not been reported previously by cave historians (Reed 2016). It bears the signatures of two artists, namely the engraver Samuel Calvert and the painter Nicholas Chevalier, both influential artists of the time (Reed 2016). Calvert was known to produce wood engravings from paintings and drawings by Chevalier, and the presence of both signatures on the Blanche Cave picture suggest they collaborated in the production of the image (Reed 2016). Additional biographical information about these artists is presented in Reed (2016). The most significant detail from the picture in *The Leader* is provided by the caption, which cites the photographer as Mr Thomas Hannay of Maldon and confirms the identity of the unknown photographer of the 1860 images commissioned by Tenison-Woods.

The Maldon-based photographer Thomas Hannay was active around Portland and other areas of regional Victoria during the late 1850s, particularly 1859 (Reed 2016). A large collection of his images, depicting rural settlements and people, is held in the State Library of Victoria. Particularly striking are his images of Aboriginal people from regional Victoria. Although considered to be an amateur he did exhibit his work and published in the Portland newspaper. Two gentlemen named Thomas Hannay lived in Maldon at the time the Blanche Cave photographs were taken (Reed 2016). Charles Thomas Hannay (known as Thomas) was born in 1805 and died in Maldon on 6 December 1883 (Reed 2016). His son, Thomas Hannay, was born in 1834 and died in 1897 (Reed 2016). Hannay senior was originally from Scotland and became a well-known and respected member of the Maldon community. The junior Hannay was a renowned marksman and also served as a Councillor in Maldon and later worked in Melbourne as the superintendent of the Immigrant's Home (Reed 2016). We cannot confirm which Hannay was the photographer of Naracoorte Caves, but suggest it was probably Hannay senior (Reed 2016).

Noted historian of Australian caves, Elery Hamilton-Smith, asserted the 1860 Blanche Cave photographs were the first showing an Australian cave (Reed 2016):

... the unknown photographer who provided the pictures of Tenison-Woods at the caves was also the first to photograph an Australian cave.

Given the date of Thomas Hannay's Blanche Cave images, they may also be some of the earliest photographs in the world to depict a cave. Charles

L. Waldack photographed Mammoth Cave in the United States in 1866 and he is regarded as the first photographer of an American cave (Howes 1989; Thompson, 2000). Early photographs from Europe depict scenes from entrances and within caves, with the first artificially lit cave photographs captured using magnesium light at Blue John Caverns by Arthur Brothers in 1865 (Howes 1989). Further research may yield additional early photographs of Naracoorte Caves..

The Hannay inscription in Blanche Cave

Despite information in *The Leader* identifying Hannay as the cave photographer, there was no physical or other evidence linking him to Naracoorte Caves. In May 2018 during a tour of Blanche Cave, one of us (ER) recognised that an engraved signature on the cave wall belonged to Thomas Hannay. We have been aware of this signature for many years, but until Hannay had been identified as the photographer of the 1860 images (Reed 2016), the significance of it was missed. This inscription provides direct evidence that Thomas Hannay visited Blanche Cave and it is located adjacent to the area where two of the images (Figures 1 & 2) were staged at the second roof window entrance (Figure 9). Additional initials in the same style as the main inscription are visible to the left and may represent another attempted engraving (Figure 10), but we will focus here on the full inscription which reads: 'T HANNAY PHOTOGRAPHER' (Figure 11).

The inscription is arranged across two lines, with 'T HANNAY' on the top line and the single word 'PHOTOGRAPHER' beneath. It is around one metre long, carved and scratched into the limestone. The uneven surface of the rock clearly proved difficult to mark in such a way, as the inscription is irregular and incomplete in places where the limestone is harder due to a calcite matrix (Figure 11). The presence of multiple scratches of around one-millimetre thickness within each carved letter suggest the marks were made with a sharp blade or knife. The carved surfaces have revealed the cleaner, creamy-white limestone beneath, while the surrounding wall is stained by biological growth and natural weathering. Unlike the many people who signed their name in Blanche Cave, Hannay did not add a date to his inscription; however, there is no reason to believe it was not directly associated with the 1860 photographs and dates to that time.



Figure 9. Location of the Hannay inscription in Blanche Cave. Arrows indicate the signature on the wall (right) and the rock where the figure was seated in the 1860 photograph (see Figure 1).

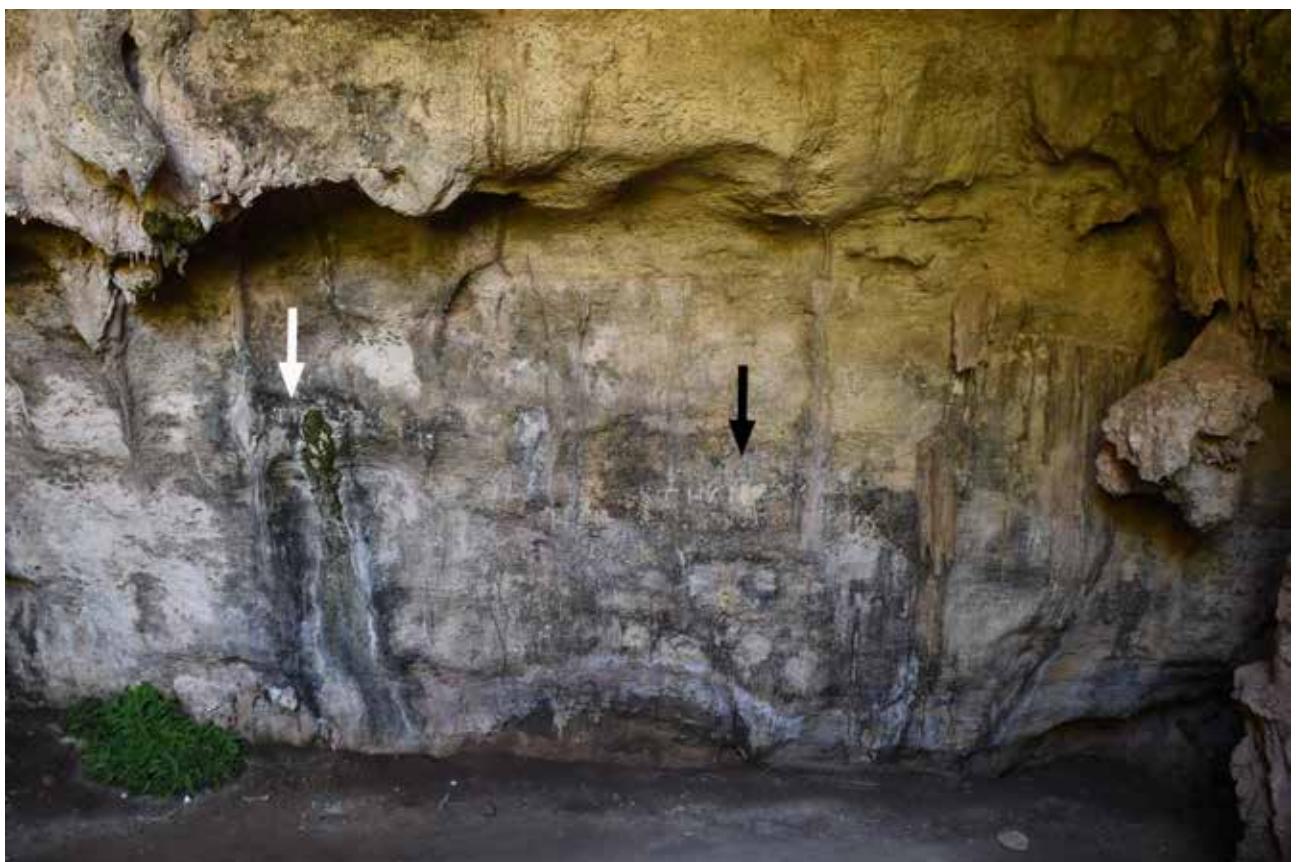


Figure 10. The Thomas Hannay inscription (indicated by a black arrow) on the NW wall of Blanche Cave adjacent to the second roof window entrance. The white arrow indicates a set of initials 'T.H.' in a similar style to the other inscription.



T H A N N A Y
PHOTOGRAPHER

Figure 11. The Thomas Hannay inscription on the cave wall in Blanche Cave (above) and an outline of the inscription (below). Scale bars are 10 cm.

The priest, the photographer and the engraver

Woods first reported his observations of the Mosquito Plains Caves in 1858, following a visit in 1857 (Woods 1858; Reed & Bourne 2013). It was this work that formed the basis for his later book. Hamilton-Smith (1997) suggested Reverend Julian Tenison-Woods commissioned the 1860 photographs for the purpose of producing engravings for his book and these were completed by artist Alexander Burkitt. The use of photographs in printed materials was not common at the time, although an advertisement in the *Border Watch*, Friday 3 October 1862, p. 1 mentions the use of photographs to produce scenic views in the book:

In the Press and will shortly be published in one volume, 8vo., GEOLOGICAL OBSERVATIONS ON SOUTH AUSTRALIA, By the Rev. Julian E. Woods, F.G.S., F.R.S.V., &c., &c. This work will contain a popular account of the Geological and Mineral Features of a great portion of the South Coast of Victoria and South Australia, and will be illustrated by many Engravings of newly discovered Fossils, named and classified. The work will likewise be largely interspersed with views (from photographs) of the extinct Volcanoes of Mount Gambier; the Caves at Mosquito Plains, &c., &c., besides an interesting account of the Geology of these remarkable features. Orders received by H. T. Dwight, Bookseller, near Parliament Houses, Melbourne; Mr. W. A. Crouch, Mount Gambier; or at the Office of this Paper. As only a limited number of copies will be printed, subscribers names should be sent in as early as possible.

Alexander Horace Burkitt (also known as A.H. Burkitt) was born in London in 1807. He was interested in art and antiquities from an early age and later became an engraver (Love 1980). In 1855, following the death of his wife Jane, he and his children moved to Australia to join his eldest son Horace who worked as a telegraph operator in Geelong and Melbourne (Love 1980). In February 1858, Alexander and family moved to Portland in Victoria to live with Horace after the opening of the Portland electric telegraph station (Love 1980). This placed Burkitt just 200 kilometres from Naracoorte immediately prior to the publication of Tenison-Woods' first account of the caves in March 1858 (Woods 1858). Furthermore, the photographer Thomas Hannay was very active in Portland at the time and a series of his images was chosen for publication in the *Portland Chronicle* in 1859 (Reed 2016). If Burkitt and Woods were acquainted and had already agreed to collaborate on production of figures for the book, then Hannay's increased profile as a photographer in Portland and his proximity to Burkitt may have won him the commission.

After moving to Portland, Alexander Burkitt worked and journeyed around Victoria and the south-east of South Australia, including travels with Tenison-Woods while the priest completed *Geological Observations*. Although this has been reported to have occurred during 1862 (DAAO 1992), it is more likely 1860 to 1861 as the book was published in 1862 and Woods wrote an acknowledgement to Burkitt dated November 1861:

One word in conclusion, with regard to the engravings. The views are from photographs. The fossils, &c., are from drawings by Mr. Alexander Burkitt, of Williamstown Observatory, Melbourne (late of the Isle of Wight). This opportunity is taken of returning very grateful thanks to that gentleman for his exertions in perfecting the illustration of the work. Penola, South Australia: November 15, 1861. (Woods 1862).

Alexander Burkitt became an assistant at the Williamstown Observatory in 1861/62 and in 1864 moved to Queensland where he settled in Ipswich. He died at Cleveland, Queensland in 1873. Burkitt and Woods worked together on one more project, with the production of engravings for another book (Woods 1865) for which Burkitt was acknowledged:

... secondly, to Mr. Alexander Burkitt, late of the Williamstown Observatory, not only for the maps and sketches which illustrate the following pages, but also for a really terrible amount of copying, and a zeal for the success of the whole work, to which I can scarcely do justice here.

The value of historical writing in caves

In 1879, Thomas Washbourne took a series of photographs in Blanche Cave, showing scenes beneath the second and third roof window entrances (State Library of Victoria H96.160/227 to 231). A report in *The Hamilton Spectator* (Thursday 21 August 1879, p. 2) records his visit to the Naracoorte Caves:

Photography. – Mr. Washbourne, after a lengthened absence, has returned to Hamilton, bringing with him some of the finest photographic pictures we have yet seen from his studio. Four of these are of a decidedly novel character, being representations of the inside of some of the wonderful caves at Narracoorte, which, owing to “the dim religious light” in which he was compelled to take them, occupied a considerable time, but his industry was well rewarded.”

One of the Washbourne photographs shows the area adjacent to the Hannay inscription, with a man leaning against a large column (Figure 12). Unfortunately, the Hannay signature is not visible, but others are obvious on the cave wall. As far as we are aware this is the first photograph showing ‘graffiti’ in the Naracoorte Caves. The signatures from this scene are no longer clearly visible and are now concealed by biological growth and natural weathering (Figure 13).

The Thomas Hannay inscription in Blanche Cave demonstrates the value of historical writing in caves, particularly when it is used as a primary source of information for research into the history of significant localities (Whyte 1997; Bilbo & Bilbo 1995). While these markings may be deemed unsightly or counter to the current paradigm of cave management, it can be damaging to the cave environment to remove them (Bilbo & Bilbo 1995). Graffiti removal and other cave ‘cleaning’ may not only have consequences for historical research, but also impact biological organisms and the integrity of the cave walls and other values.

Cave cleaning in Stick Cave at Naracoorte in the late 1980s resulted in exclusion of the cave cricket *Novotettix naracoortensis* from one side of the cave entrance and a decline in use of the cave by crickets (Simms and others 1996). Microbial and other biological communities on cave walls are part of the energy dynamics of the cave ecosystem and important food sources for animals such as invertebrates. Natural cave walls also provide habitat and refuge for animals and this can be obliterated by cleaning.



Figure 12. 1879 photograph by Thomas Washbourne of a scene near the NW wall of Blanche Cave adjacent the second roof window entrance. State Library of Victoria Image H96.160/231



Figure 13. Comparative views of the area from the Washbourne photograph (Figure 12), showing the scene in 1879 and in 2018. Note the difference in the visibility of the graffiti behind the columns. It is interesting to note the stalagmite near the signature area in the modern photo. This is not apparent in the 1879 photograph and must have been placed there.

A project in Cathedral Cave at Naracoorte Caves was aimed at restoring a heavily vandalised cave to a more natural state to benefit cave biology and improve the aesthetics and safety of the cave for visitors (Bourne 2001). The project was successful overall and today the biology of the cave is thriving. Carved inscriptions in the entrance chamber of the cave were left intact in favour of preserving natural biological communities (Bourne 2001). However, it was noted that removal of candle smoke markings from the walls in the dark zone resulted in an immediate impact on cave invertebrates. As the cleaning was done carefully and in small, patchy areas, cave fauna re-colonised relatively quickly; but this is an important example of how well-meaning restoration has consequences (Bourne 2001).

The decision to remove inscriptions becomes complicated when there is obvious and unsightly modern graffiti overlying areas of cave walls and other traces of damage by unwanted visitors (Bilbo & Bilbo 1995). If the only reason for removal is aesthetic (i.e. it is unsightly), we suggest that is not sufficient justification if it results in damage to the cave wall. Removal of graffiti may be justified in some cases as a deterrent to future vandalism by not drawing attention to an area, but in 'soft' limestones such as Naracoorte it may in fact serve the opposite purpose. The Miocene marine limestone at Naracoorte Caves is relatively 'soft' and unconsolidated compared with much older limestones hosting other Australian cave systems. The surface of walls at Naracoorte is often covered with biological growth, particularly near entrances, and also micro-crystalline soft calcite deposits known as 'moon-milk'. Any damage to the walls is very obvious due to its different colour and cleaned areas may provide an obvious 'fresh canvas', leading to more graffiti. Effective management of visitor activities should reduce the occurrence of new markings.

Another dilemma for cave managers relates to the age of the markings. When does graffiti become history? In some cases, such as the inscription in the Drachenhöhle in Austria dating to 1387, the significance is obvious (Kempe 2017). A much later example from Jenolan Caves is a signature and sketch from around 1949, by renowned Australian artist Brett Whiteley (Whyte 1997). Bilbo & Bilbo (1995) use the cut off for historic writing as 50 years old or greater, but there does not appear to be any consensus on how managers approach this issue. Nonetheless, they suggest few cave restoration projects are preceded by the identification and

documentation of historical writing prior to cleaning. Policies for cave restoration projects should be part of a site's management plan, and standard procedures developed that include thorough documentation, including photography of areas prior to restoration and consultation with specialists if historical writing is found. The decision to remove graffiti or clean areas of caves should be weighed against the potential impact on other values.

Conclusions

The discovery of the inscription by Thomas Hannay in Blanche Cave at Naracoorte confirms that the photographer visited the cave. The photographs he produced in 1860 are likely the first to depict an Australian cave and illustrate the association between Woods, Hannay and the engraver Alexander Burkitt, providing a fascinating insight into the early history of the Naracoorte Caves and the activities of three historically significant figures.

Historical writing in caves serves as primary evidence for historians and should be considered important cultural heritage. We suggest graffiti removal is largely inappropriate in soft limestones such as at Naracoorte as the conservation benefits of leaving surfaces intact outweigh the aesthetic reasons for removal. If cave cleaning is to be conducted it should be done only after thorough documentation of the area and justification for restoration is considered.

Acknowledgements

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