



Blue Mountains World Heritage Institute's  
Natural and Cultural Heritage Program

# Assessment of the Aboriginal Cultural Heritage Values of the Greater Blue Mountains World Heritage Area

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A Report for the Department of Environment and Water  
Resources

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## 1. An Introduction to the Assessment Process

This report is part of a larger series of reports in response to a proposal to place the Greater Blue Mountains World Heritage Area on the National Heritage List. In the brief, *Summaries of Indigenous heritage values for the Greater Blue Mountains Area nominated to the National Heritage List*, it was required that the cultural heritage of the Greater Blue Mountains area be assessed in comparison to that of other regions as well as against each of the National Heritage List criteria (consultancy brief required output 4). More specifically, Section 324D of the Environment Protection and Biodiversity Conservation Act sets out the following criteria for a place to be entered on the National Heritage list:

*(a) the place has outstanding heritage value to the nation because of the place's importance in the course, or pattern, of Australia's natural or cultural history;*

*(b) the place has outstanding heritage value to the nation because of the place's possession of uncommon, rare or endangered aspects of Australia's natural or cultural history;*

*(c) the place has outstanding heritage value to the nation because of the place's potential to yield information that will contribute to an understanding of Australia's natural or cultural history;*

*(d) the place has outstanding heritage value to the nation because of the place's importance in demonstrating the principal characteristics of:*

*(i) a class of Australia's natural or cultural places; or*

*(ii) a class of Australia's natural or cultural environments;*

*(e) the place has outstanding heritage value to the nation because of the place's importance in exhibiting particular aesthetic characteristics valued by a community or cultural group;*

*(f) the place has outstanding heritage value to the nation because of the place's importance in demonstrating a high degree of creative or technical achievement at a particular period;*

*(g) the place has outstanding heritage value to the nation because of the place's strong or special association with a particular community or cultural group for social, cultural or spiritual reasons;*

*(h) the place has outstanding heritage value to the nation because of the place's special association with the life or works of a person, or group of persons, of importance in Australia's natural or cultural history;*

*(i) the place has outstanding heritage value to the nation because of the place's importance as part of indigenous tradition.*

As Domicelj states in her report, *Indigenous Heritage Values in the Greater Blue Mountains Area Comparative Analysis*, 'Of the nine National Heritage assessment criteria, it is Criterion (c), followed by Criterion (a) and Criterion (i), which most clearly establish the national significance of the Greater Blue Mountains Area's indigenous cultural heritage. Criteria (b) and (g) are also relevant'.



## **2. The Greater Blue Mountains World Heritage Area ( GBMWhA)**

The Greater Blue Mountains World Heritage Area (GBMWhA) was inscribed on the world heritage list on the 29<sup>th</sup> November 2000 under the natural criteria II and IV being the eucalypt/sclerophyll ecosystems (containing 14% of total eucalypt species in the world) and the biodiversity of the region. It covers an area of about 1.03 million hectares of Australia's eastern sandstone plateau country forming a elevated barrier between the coastal strip and the inland areas. It is a relatively continuous area of around 230 km north to south and up to 80 km east to west and is within 60 km of the centre of Sydney. There are currently eight contiguous properties that make up the Greater Blue Mountains World Heritage Area. They are: Wollemi National Park; Yengo National Park, Gardens of Stone National Park; Blue Mountains National Park, Kanangra-Boyd National Park, Jenolan Caves Karst Conservation Reserve, Nattai National Park and Thirlmere Lakes National Park.

Prior to the arrival of Europeans the area was occupied, modified and maintained by the many autonomous Aboriginal groups who lived and moved around the region. There are six distinct tribal groups who have traditional rights and custodial responsibilities for the indigenous heritage of the region that are: the Darug, the Gundungurra, the Wanaruah, the Wiradjuri, the Darkinjung and the Tharawal.

How these Aboriginal peoples perceived their world and themselves was profoundly modified by the invading British colonialists leading to increased and dramatically divergent cultural adaptations and behaviour. This cultural response was in part appropriated and partly forced upon the indigenous people of the area.

This document summaries the current published knowledge of Aboriginal cultural heritage, as it relates to the Greater Blue Mountains World Heritage Area, and identifies aspects that comply with the National Heritage List (NHL) Criteria for potential listing on this list. It should be noted that if and when the GBMWhA was to be included on the NHL, the local Aboriginal people should be involved in the nomination process for their cultural heritage, and values to be truly represented in the process. This assessment is inevitably culturally limited in that it is essentially an assessment of the archaeological and historical aspect of Aboriginal cultural heritage.

As with all aspects of archaeology knowledge is limited to published data, and as there has been no systematic survey of the area, there are large knowledge gaps. This makes comparative assessment for this NHL nomination more difficult than it might otherwise have been if comprehensive data sets were available. A systematic compilation of heritage data for the GBMWhA as a specific area has only been pieced together over the past eighteen month as a consequence of the Mapping Country project. (Merson & Hooper 2006)

## **2.1 The DECC Archaeological Record of the region**

The nature of the formation of an archaeological record favours the highly visible and easily identifiable aspects such as rock art. This is seen in the New South Wales official record of indigenous archaeological sites, the Department of Environment and Climate Change's Aboriginal Heritage Information Management System (AHIMS).

As of February 2006 there were 850 sites listed in the GBMWH on AHIMS, and a total of 973 features. AHIMS lists sites as discrete places in the landscape represented by map coordinates with each of these possibly represented by one or more feature types such as art, artefact or modified tree (see appendix 1 for complete list and description). These features are archaeologically contrived categories representing the past indigenous activities that remain in the landscape and are essentially the "Aboriginal archaeological record".

Blue Mountains World Heritage Institute in conjunction with NSW Dept of Conservation and Climate Change, the Blue Mountains City Council and the Hawkesbury/Napean Catchment Management Authority has developed a series of predictive models for the GBMWH (Ridges 2006). The models developed are not predicting the actual occurrence of archaeology but instead describe the relative likelihood of the feature occurring in any 25 m square of the grid.

This is important for how the model is used. To interpret the model, the values in each square of the model grid describe a ramp between the lowest and highest likelihood of a site occurring. So, where a square in the grid is at the higher end of the scale, then it is more likely that you will find a feature at that location. There are many things which may influence a feature not occurring on a given grid square, such as visibility, conservation, land-use and cultural issues restricting access (Hooper 2006; Ridges 2006).

The models developed do not take into consideration land impacts, but rather model pre European impacts. This is important to take into consideration when interpreting models, as features exist in depositional and re-depositional environments. (Hooper 2006). Nonetheless it provides a useful tool by which the location of significant new indigenous heritage sites might be found in the area. For example, the recently discovered Eagles Reach rock art site is one of a number of important sites in the Wollemi part of the GBMWH that lies at a location where the model predicts a high probability of cultural heritage sites.

The AHIMS data set used in this report, also carry with it a raft of issues. In the data the feature class Artefact is representative of both isolated finds and campsites. The model is based on the likelihood of an occurrence of this type of feature Artefact. The same for Rock Art feature class, as it includes both open and closed art sites (in shelter and on sandstone platform).

Within the modelling process, different variables used will have different effects on the prediction of feature likelihood. This can be analysed within the model. In the Artefact model, the variable proximity to water was one of the main contributors to predicting site likelihood, with rainfall and temperature also major influences. This may reflect that ideal camping places on average are warm and dry.

Mitchell's landscape data is the next major driver, and it is important, as they can indicate key plant species (Ridges 2006). An analysis of Mitchell Landscapes found that the Lapstone Slopes, Blue Mountains Plateau and the Hawkesbury - Nepean Channels and Floodplain all ranked about the same. It could be concluded from this that there is a similar likelihood of an artefact feature occurring in either landscape types.(Hooper 2006)

<b>Artefact Feature</b>	<b>Number</b>
Aboriginal Ceremony and Dreaming	1
Aboriginal Resource and Gathering	1
Art	432
Artifacts	241
Burials	5
Ceremonial Ring	2
Conflict	0
Earth Mound	1
Fish Trap	0
Grinding Grooves	214
Habitation Structure	0
Hearth	0
Non Human Bone and Organic Material	0
Ochre Quarry	0
Potential Archaeological Deposit	3
Shell	1
Stone Arrangement	41
Stone Quarry	3
Modified Tree	13
Waterhole	15

## Table 1 - AHIMS Data for the GBMWH

### 2. 2 Value of the GBMWH based on modeling undertaken by DECC, NSW.

Archaeological predictive modelling of the state of NSW undertaken by the Department of Environment and Climate Change using the information they hold in their AHIMS database, can be used to quantify the potential of cultural heritage material protected within the Blue Mountains World Heritage area compared to the rest of NSW. This analysis is summarised in the table 2. While this is only indicative, it provides a useful indication to the value the GBMWH has in the regional conservation of Central South Eastern (NSW) archaeology.

The analysis describes the percentage distribution of the different archaeological feature types in NSW, and occurring within GBMWH. This is before 1788 effectively. The other column shows the percentage of these archaeological features occurring within the GBMWH after the impacts of current and past land use is taken into account. This was done by weighting each land use with a number to represent the potential impact from land use types (Table 2).

The results indicate that the GBMWH is conserving an important sample of southeast NSW Rock Art (7.392%)<sup>1</sup>, Ceremonial rings (3.402%), Grinding grooves (6.023%), Stone arrangements (2.672%), Stone quarries (1.691 %), Stone artefacts (1.849%) and Scarred trees (1.096 %) and to a lesser extent Burials (0.661 %), Earth mounds (0.117 %), Hearths (0.007 %) and Shell middens (0.349 %).

It is significant to note the difference in potential distribution, as an indication of the level of impact or threat that has occurred on that feature type. For Rock Art, for example, the potential total distribution of 6.299% in the GBMWH has increased to 7.392 % showing a significant impact on this feature type across the state. This shows that the GBMWH has a significant role to play in the conservation of Australian Rock Art.

The predictive models also allow for some assessment to be made of the potential of the area to provide further archaeological data. There has been limited systematic survey of archaeological sites within the GBMWH, and even less work on Aboriginal community connections to Country. It is an important challenge to find ways of incorporating Aboriginal concepts and cultural constructs into how archaeological research is carried out.

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<sup>1</sup> % are the amount of percentages of the potential total distribution of the feature type across the state of nsw being conserved in the GBMWH



<b>Archaeological Feature</b>	<b>% of original distribution in NSW, occurring within BMWH</b>	<b>% of remaining distribution in NSW occurring within BMWH</b>
Stone artefacts	1.495	1.849
Rock Art	6.299	7.392
Burials	0.472	0.661
Ceremonial rings	1.549	3.402
Earth mounds	0.070	0.117
Grinding grooves	4.865	6.023
Hearths	0.004	0.007
Shell middens	0.221	0.349
Stone arrangements	2.116	2.672
Stone quarries	1.501	1.691
Scarred trees	0.502	1.096

**Table 2 - Analysis of predicted conservation status**

### **2.3 The Cultural Heritage of the Greater Blue Mountains World Heritage Area.**

The vast Greater Blue Mountains World Heritage Area (GBMWhA) is a unique part of Australia because of its range of natural landscapes, ecological zones and its eucalypt vegetation, reasons why it received World Heritage status on natural criteria in November 2000. The Blue Mountains region has been explored by Europeans since the December 1789 expedition of Lt. Dawes, Lt. Johnson and Mr. Lowes of H.M.S. Sirius (Breckell 1993:116; Cunningham 1996) but, until recently, it has only superficially been studied for rock art. This is despite intensive nearby regional studies in the Sydney region (McDonald 1991, 1994; McMahan 1965; Maynard 1976), to the south-east (Officer 1992, 1998; Sefton 1988) and in many other parts of Australia. Only a handful of large sites have been recorded in full detail, although site inventories or brief details are available for many in the central, populated part of the Blue Mountains proper (eg. McCarthy 1946, n.d.; Sim 1965; Stanbury and Clegg 1990; Stockton 1993). The Wollemi area, in particular, has hardly been studied, partly because of its remote and rugged nature, until our team, consisting of indigenous community members, archaeologists, bushwalkers and students, began a program of survey and recording in 2001.

In the southern Blue Mountains, a pioneering study by Kelleher (2002) provides a first GIS and multivariate statistical analysis for known Blue Mountains sites south of the Wollemi, as well as preliminary results for relationships between archaeological sites and certain geographic features at five key locations. Kelleher's research deals specifically with the spatial relationships of sacred behaviour, and

attempts to identify religious behaviour in the archaeological record. Kelleher examined 'the often latent connections between places in the Blue Mountains, by understanding religion as a process – a behaviour – not a specific set of elements' (Kelleher 2002:275). Indeed, Kelleher found that these five places differentiated themselves from the rest in terms of spatial structure and geography. A similar pattern is now being revealed in Wollemi National Park.

Kelleher's Ph.D. (2002) worked towards identifying spatial behavioural variations in the archaeological record of the Blue Mountains. He created a detailed matrix of the southern mountains' archaeology and geography through which he was able to determine that empirical variations in rock art corresponded with variations in lithic assemblages, grinding groove structure and geographic features. As the art changed across the region so too did the associated tool types and maintenance strategies. People were doing different things at specific places in the mountains, which was not solely the result of the changing environment. How people perceived place influenced how they behaved at a place. Kelleher's research demonstrated that to some degree people's actions are systematically patterned by their perceptions, and that this patterning (if not the meaning of the perception) is often embodied in the archaeological record. Kelleher's spatial analysis was applied to the southern region as a whole at the artefact level, which indicated statistically significant trends. Variation in rock art across a region is often linked with differentiation in sociocultural units (Wobst 1977), changes in behaviour (McDonald 1994, 2000) or geographic features (Bradley 2000). Because Kelleher's research showed how variations in rock art correspond to specific regional trends for the full range of archaeological features it is the best model to use to study the rock art of Wollemi National Park. It also is useful because these regional trends can be correlated with linguistic, clan and other forms of social identity (see also Taçon 1994).

Until recently, Wollemi was often referred to as New South Wales' last large remaining area of wilderness but since 2002 the discovery of hundreds of Aboriginal cultural heritage sites has dramatically challenged this view. The recent discovery and documentation of hundreds more sites in other parts of the GBMWA, such as the Blue Labyrinth in the Blue Mountains National Park, is also revealing that the entire GBWHA saw extensive use by Aboriginal people over the past few thousand years and more sporadic occupation before. Shelters were occupied, shelter walls and rock platforms were marked with imagery and grooves, artefacts were made and the area was utilised well after the settlement of Port Jackson and what is now greater Sydney by Europeans. Even the most rugged areas, places extremely difficult to access today, were visited, marked and utilised in economic, spiritual and other ways. Today the GBMWA remains highly significant for the many Aboriginal communities associated with it and there is a renewed and reinvigorated interest in the Area's cultural heritage.

This growing interest is seen in many ways but especially in terms of Aboriginal involvement in research and reactions to new discoveries. Furthermore, as key localities and prolific rock art sites are documented individuals from a range of

associated Aboriginal communities voluntarily share oral history, songs and dances they see as related to those places. In some cases the information can be traced back to the 1800s and in many cases there are only a few individuals alive with detailed relevant knowledge. Much of the impetus for sharing and passing on this information has arisen as a result of *The Landscape of Blue Mountains Rock-Art* research project, which commenced in 2001. It is this project that has added much information to both the archaeological and ethno-historic databases and allows us to more validly compare the cultural heritage of the GBMWHHA to other regions.

The main case for the inclusion of the GBMWHHA on the National Heritage List rests, we believe, with the recent discovery of highly significant rock art over the past decade and its growing significance for the Aboriginal communities of the surrounding region. The following section documents this discovery process, and the indigenous involvement in with these new discoveries, which may represent only a fraction of what is yet to be discovered.

### **3. The Landscape of Blue Mountains Rock Art**

In 2001, Paul Taçon, then at the Australian Museum but now at Griffith University, was invited by Wayne Brennan and Shaun Hooper, a member of the Blue Mountains Aboriginal community, to visit rock art sites in the newly declared World Heritage Area. After extensive consultation with Darkinjung, Darug Wiradjuri and other traditional owners it was decided a new research project would be created focusing on Wollemi National Park. Dave Pross became the main Darkinjung partner in this project soon after while Matthew Kelleher became an archaeological partner.

Until then, Wollemi had not been surveyed for cultural heritage sites. Many archaeologists and rangers suggested it was too rugged and wild, that no sites would be found. But there are hundreds of sites around the edges and elders said surely there were more in Wollemi. Indeed, this predication was correct and our team, consisting of Aboriginal community members, archaeologists, students and bushwalkers, has since found hundreds of sites, many with spectacular engraved, drawn, painted and stencilled rock art (e.g. the Eagles Reach site, Figure 1).

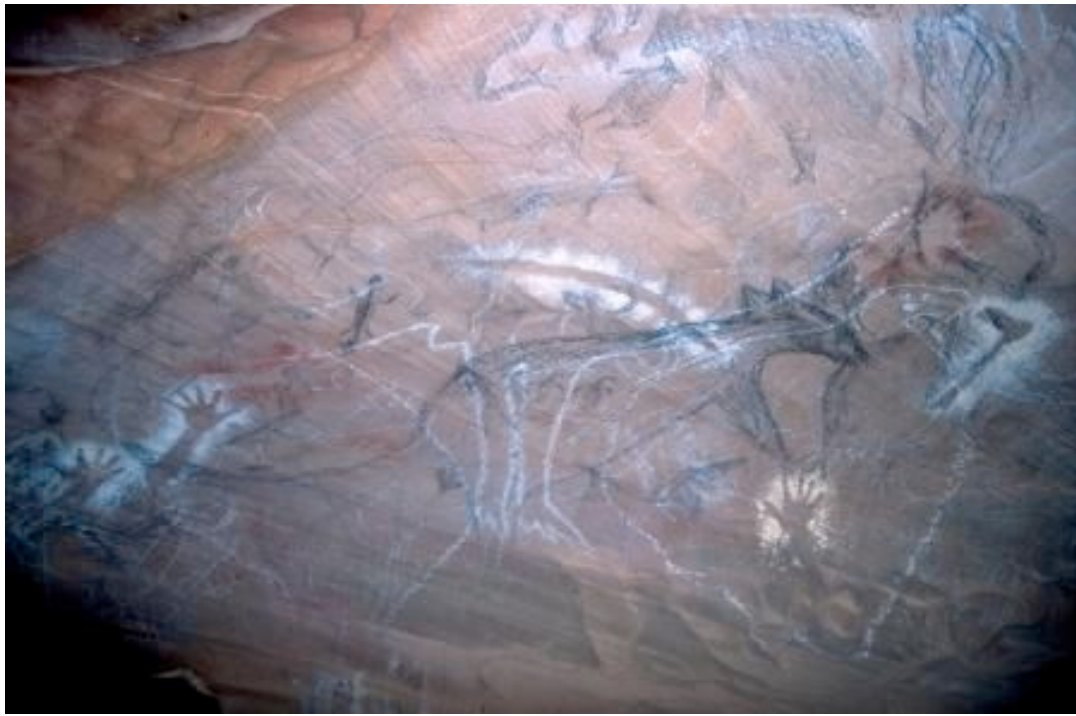


Figure 1: The eastern end of Eagle's Reach, the largest and most spectacular pigment art site in the Greater Blue Mountains World Heritage Area (photo by Paul S.C. Taçon).

From the beginning this has been a sharing project, with all aspects jointly managed and conducted by individuals of both the Aboriginal and archaeological communities. Even publications are jointly produced and authored. Strong friendships have developed as a result, not only between archaeologists and Korries but also between people from different Aboriginal groups. The project aims to better understand the relationship between the cultural heritage, especially rock art sites (drawings, stencils, paintings and engravings), of the Blue Mountains World Heritage Area and that of other parts of New South Wales and to describe culture change in Wollemi National Park over the past few thousand years. The project involves extensive ongoing community consultation and participation and advocates a whole of government, industry and community approach to research. Fieldwork is concentrated in the Wollemi region of the Blue Mountains World Heritage Area and over 200 previously unknown sites, half with rock art, have been documented in wild, rugged locations during the first two phases of the project. Besides scientific significance, the results have social significance for Aboriginal stakeholders and are of great value to national park and World Heritage Area managers and interpretation officers, tourists and others with an interest in Aboriginal culture, rock art and the Blue Mountains World Heritage Area.

The project was conceived as a long-term study of seven to ten years. There are at least three fieldwork phases: an initial pilot study, an intensive recording phase along a traditional travel route and a general survey, recording and possible excavation phase.

Phase 1: 19 January 2001 – 30 November 2003

Phase 2: 5 January 2004 – 30 June 2005

Phase 3: 1 July 2005 – 30 June 2008

The project is managed and co-directed by Prof. Paul S.C. Taçon (Griffith University). The other project directors are Dr. Matthew Kelleher (Australian Museum), Wayne Brennan (University of New England and Blue Mountains World Heritage Institute) and Shaun Boree Hooper (Blue Mountains Aboriginal Community and Blue Mountains World Heritage Institute). Other collaborators include Dave Pross (Darkinjung Local Aboriginal Land Council), Evan ‘Yanna Muru’ Gallard (Darug Custodial Aboriginal Corporation), Graham King (Wiradjuri community), Andy Macqueen (Blue Mountains author and conservationist), Michael Jackson (University of New England) and an extensive network of Aboriginal community members, bushwalkers and students. Aboriginal participation and consultation is a key component of the project at every level, including fieldwork, analysis, interpretation and publication. Student and bushwalker volunteer service has also been crucial to the project. A number of rock art specialists and other archaeologists from various universities and New South Wales government departments have also participated on fieldtrips.



Figure 2: Graham King (Wiradjuri community) at one of the newly discovered rock art sites, June 2005 (photo by Paul S.C. Taçon).

### *Phase 1 Highlights*

The most outstanding site, and one of the most significant pigment sites of the greater Sydney region, is ‘Eagle’s Reach’ (see Figure1). It was discovered by four bushwalkers in October 1995. Our team, which included Paul Taçon, Wayne Brennan, Andy Macqueen, Evan Gallard, Matthew Kelleher and Jill Ford recorded the site in detail on 6 and 7 May 2003. This was the first scientific assessment and documentation of the site. It was named Eagle’s Reach at this time. At Eagle’s Reach 206 individual motifs were recorded, consisting of 166 drawings, 39 stencils and 1 painting. They were found arranged in twelve superimposed layers. One of

the special features of the site is the large range of Wollemi animals drawn with great skill and accuracy. There are all sorts of birds, mammals and reptiles, including superb goannas, eagles and an uncommon white outline wombat. Rare motifs, such as a double-headed human-like figure and animal-headed beings with human bodies also feature at the site. These creatures, some with bird-like heads, others with macropod-like heads may depict Ancestral Beings but certainly reflect spiritual beliefs common to many parts of Australia. However, in the greater Sydney region they are rare in the pigment art, found only at a handful of sites to the east of Eagle's Reach, in parts of Darkinjung country. The oldest stencils, in red and a dark yellow, are believed to be between 2000-4000 years old. The oldest charcoal drawings are at least 1600 years old. Given the many layers of imagery at Eagle's Reach, it obviously was important for many generations of Aboriginal people to visit and mark this incredible terrain with symbols of group and individual identity.

Other sites we have discovered include open lithic scatters, shelters with lithics, and in one case a wooden fire stick, axe grinding groove clusters, open engraving sites and both large and small shelters with pigment art (stencils, drawings and paintings). Many sites contain components of what is at Eagle's Reach, as well as other sorts of imagery. A vertical engraving site with 172 designs, most of which are large bird tracks, has a mineral crust lying over some of the art. This revealed a minimum age of 2000 years using AMS radiocarbon dating. More details about Phase 1 can be found in Taçon *et al.* 2003.

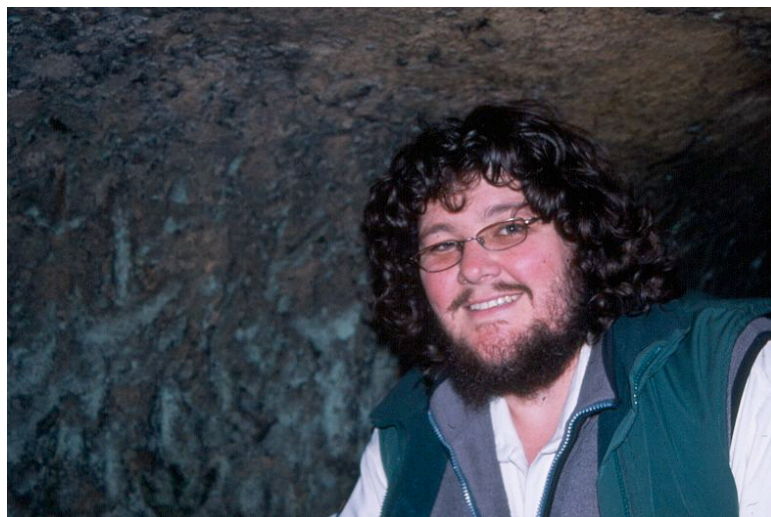


Figure 3: Shaun Hooper (Wiradjuri) at Emu Cave where a minimum age of about 2000 years was obtained for engraved bird tracks (photo by Paul S.C. Taçon).

#### *Phase 2 Fieldwork: September 2004 - July 2005*

An investigation of the landscape patterning began in the second phase and is linked to a Cultural Mapping program the Blue Mountains Aboriginal Community recently began, now based at the Blue Mountains World Heritage Institute. During Phase 2 we conducted a number of intense fieldtrips made possible through National Geographic Society funding for helicopter and other support. The use of

a helicopter was particularly valuable as it allowed us to conduct longer and more intense fieldtrips in remote, rugged locations. After an initial aerial scouting and survey trip on 16th August 2004, five fieldtrips were undertaken, leading to many significant discoveries. A total of 23 days was spent in the field but given the size of the field parties this equates to 260 person days.

### Trip 1

The first fieldtrip, on the western side of the Wollemi from 21-28 September 2004, led to the discovery of 56 previously unknown Aboriginal sites, 17 with rock art, in eight days. Twelve people participated on the trip, including representatives of the Aboriginal community and the NSW Department of the Environment (DEC) National Parks and Wildlife section. At the sites 69 rock art motifs and 46 grinding grooves were recorded. The largest site has 29 charcoal designs, including human-like figures, bird, a flying-fox and a macropod, possibly with a joey.

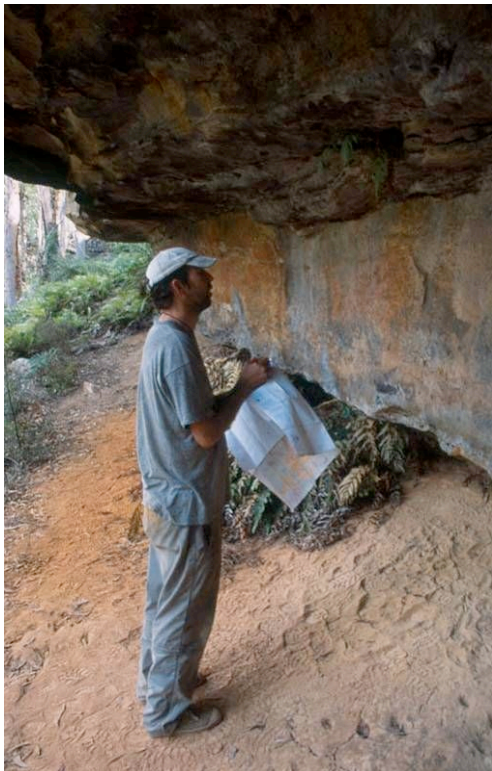


Figure 4: Evan Yanna Muru Gallard recording details of the largest rock art site discovered in September 2005 (photo by Paul S.C. Taçon).

A rare contact motif was found at one location, a faint red-outline depiction of a horse. The horse has a macropod-like tail but the head, neck and front legs are very horse-like. The head and ears hang down; there is a bit in the mouth with a rein coming up from it, across the profile head, to a point above head and neck. There does not appear to be a rider. All four legs are roughly of equal length. Because the tail looks more macropod-like than horse-like the image is likely early post-contact, possibly dating to the 1830s or 1840s (Europeans first ventured near this area in the 1830s). This is because in many parts of Australia horses and

buffalo were depicted with macropod features in early contact rock art, the artists using familiar conventions of depiction for unfamiliar subjects. Large kangaroos were the largest creatures they were used to, so some of their features (usually the tail and/or shorter front limbs) were incorporated into depictions until people became familiar with the introduced fauna. There is a very naturalistic red-outline macropod with a joey in its pouch next to the horse. These are the only two motifs in this particular shelter and they appear contemporaneous given the spatial arrangement, style, colour and technique.

Importantly, on this fieldtrip a traditional east-west travel route was also located and imagery typical of the eastern Wollemi was found at a few sites in the west, indicating possible links between the Eagle's Reach area and the western Wollemi.



Figure 5: Jacky Ward, Evan Yanna Muru Gallard and Wayne Brennan recording one of the recently discovered groove sites on the Wollemi travel route, September 2004 (photo by Paul S.C. Taçon).

### Trip Two

On 5 October 2004 Paul Taçon led two Aboriginal elders, UNESCO and NSW government representatives to Eagle's Reach in order to discuss the importance of the site and the need for a management plan that includes further survey and recording. Dave Pross, Darkinjung Local Aboriginal Land Council and Warrick Peckham, Bathurst Local Aboriginal Land Council discussed these issues with the Honourable Bob Debus (NSW Attorney General, Minister for the Environment and local Blue Mountains MP) and Richard Englehardt (Regional Advisor for Culture in Asia and the Pacific, UNESCO). DEC regional manager, Geoff Luscombe, also accompanied the group. Helicopter support was provided by the NSW Department of Environment but a difficult walk of over two hours across rugged terrain was also required.





Figure 6: Warrick Peckham, Richard Englehardt and Dave Pross emerge from the helicopter before making the final trek to Eagle's Reach, October 2004 (photo by Paul S.C. Taçon).

### Trip Three

On 3 December 2004 Paul Taçon travelled to Emu Cave, near the Bells Line of Road, to produce a three-dimensional photographic/photogrammetric record of the vertical engraved panel initially recorded, traced and dated in 2003. Prof. John Fryer (University of Newcastle), Dr. Jim Chandler (Loughborough University, UK) and Dr. Eric Kniest (University of Newcastle) trialed a straight-forward, portable and cost effective method they recently developed for making three-dimensional records of rock art (eg. see Chandler *et al.* 2005). The day was spent digitally surveying and recording the panel. Both 3-D stills that allow measurement between motifs and a digital video fly through of the site were produced.



Figure 7: Prof. John Fryer, Dr. Jim Chandler and Dr. Eric Kniest making a 3-D record on the main Emu Cave panel, December 2004 (photo by Paul S.C. Taçon).

### Trip Four

From 4 -10 April 2005, a team of 19 flew into remote parts of eastern and central Wollemi National Park by helicopter for the largest trip of Phase 2. Seven team members surveyed a ridge line some distance to the south of the Eagle's Reach area, previously not investigated for cultural heritage. Eighteen art sites were found, one with over 80 rock art motifs and another two with over 50. It is estimated that there are at least 300 rock art motifs at the 18 sites. The rock art consists mainly of stencils and drawings, many of them human-like figures, but the subject matter is different from that of the Eagle's Reach area. The sites will need to be recorded in detail and further survey undertaken in this area. More importantly, this find strongly suggests there are likely dozens more undocumented/unknown sites between there and the Eagle's Reach area, spread over several square kilometres. Survey of this intervening area is thus a priority for Phase 3.

The rest of the team worked in the Eagle's Reach area. Five were Greater Blue Mountains Aboriginal community members visiting the art sites for the first time. They were taken to a number of key sites, including Eagle's Reach itself. All were extremely impressed with the art, the sites, the landscape and the research project, offering their full support to future work. Smoking and body painting ceremonies were performed each day, the first to be held in this part of Australia for perhaps 200 years. A few sites previously located by our team were also recorded by the group, including what appears to be one of the oldest hand stencil sites. This site also has excavation potential.



Figure 8: Paul Taçon being ritually smoked by Brett Allen with Chel Roxburg in the background, April 2004 (photo by Michael Jackson).

Finally, at one location an extraordinary engraving was found that may be one of the oldest surviving rock art images in the entire Blue Mountains World Heritage Area. It consists of a finely pecked bird in an old style not typical of the greater Sydney region. In terms of form, style and content it is more typical of engraved figures found in north-western New South Wales (eg. Mootawingee), central Australia and the Keep River region of the Northern Territory's northwest. It has

a rich patina, the same as the surrounding rock, and was engraved on a hard and durable quartz-rich sandstone block. It suggests that people were visiting this rugged/remote area from very far away for many thousands of years and adds to other evidence that lots of different Aboriginal groups visited and marked this area. This and previous discoveries, as well as contemporary Aboriginal interpretation, also indicates this area was long considered to be a very important spiritual place (see also Taçon *et al.* 2006).



Figure 9: Pecked bird discovered in April 2005 (photo by Paul S.C. Taçon).

#### Trip Five

A follow-up trip from 26 June – 1 July 2005 rounded off Phase 2, with the full recording of five rock art sites found on previous trips, the locating of sites recently reported by bushwalkers, further survey and more digital film shooting. Thirty-four rock art motifs were documented in detail at the five sites. Motifs recorded include several orange goannas/lizards at one site, white hand stencils, charcoal human figures and various abstract charcoal designs. This trip was hampered by particularly inclement weather, with pouring rain, cold temperatures and strong winds for the duration. Fortunately, the weather cleared the morning we were due to fly out by helicopter as on other days the cloud cover was too low to fly and rivers had quickly risen to dangerous heights, making a walk out of the area very difficult. Seven people participated on this trip, including two members of the Aboriginal community and one DEC representative.



Figure 10: Matthew Kelleher, Margrit Koettig and Jody Cameron recording a recently discovered site west of Eagle's Reach, June 2005 (photo by Paul S.C. Taçon).

#### Phase 2 Conclusions

Phase 2 results were very revealing in that fieldwork showed there are probably hundreds of rock art sites with thousands of motifs waiting rediscovery in the Wollemi. Even very remote and rugged areas within Wollemi National Park were found to contain both shelter and platform rock art sites, shelters with occupation evidence but no rock art, open lithic scatters and grinding groove complexes. Site patterning is now emerging, with travel routes and habitation preferences aligning with key ridgelines and waterways. Indeed, sites appear clustered in certain parts of the Wollemi, often with a ridge travel route between.

The Eagle's Reach site has been shown not to be an isolated location but rather an integral part of a network of sites. Eagle's Reach has also been more fully documented from an ethnographic point of view with Aboriginal individuals and communities in agreement that it has long been a focal point within the landscape. It is interpreted as a teaching site associated with the Eagle Ancestor shared by many groups of people speaking various languages. Today it is considered one of the most important sites of the region and one worthy of maximum protection and conservation.



Figure 11: Michael Jackson and Matthew Kelleher searching for sites, June 2005 (photo by Paul S.C. Taçon).

### *Phase 3:2006-2007*

Phase 3 is the biggest phase of the project. Now that we have a large team of Aboriginal community members, students and bushwalkers trained and experienced in both rock art survey/recording and negotiating/surviving in such a challenging environment we are ready to look at the big rock art picture for the Wollemi region. The objectives of Phase 3 are (a) to develop a predicative model for locating rock art and other Aboriginal sites in the Wollemi; (b) document traditional travel routes and Dreaming Tracks; (c) finish survey in key areas; (d) record as much of the rock art as possible in detail and before sites deteriorate from natural processes and increasing tourist pressure; (d) possibly excavate some significant rock shelters with art in order to better determine age of occupation and associated activities; (e) contribute to a management and preservation plan to be developed for the area; and (f) make a documentary film on the rock art, the documentation process and the Aboriginal community members involved.

### Trip 1

From 2-7 April 2006 a mostly Aboriginal team was deployed to the Pinchgut Creek area. Six individuals led by Wayne Brennan walked from the Colo River to Mt. Cameron. They successfully relocated two major rock drawing sites reported by bushwalkers in 2005. They also further explored the east-west travel route across Wollemi National Park where many cultural heritage sites appear to be clustering. Some individuals, such as Graham King and Wayne Krause, walked the route for the first time.



Figure 12: A recently discovered drawing at a Pinchgut Creek site (photo by Paul S.C. Taçon).

### Trip 2

A major expedition to a rugged part of Wollemi National Park was organised for 10-16 September 2006. Two teams of seven individuals were deployed on neighbouring ridgelines. Teams included Aboriginal representatives, archaeologists, members of the bushwalking community, DEC employees and a journalist. The expedition was project managed by Professor Paul S.C. Taçon. Taçon and Wayne Brennan led one team while Dr. Matthew Kelleher and Andy Macqueen led the second. Each team made a number of significant discoveries which highlight the enormous potential for cultural heritage sites in Wollemi National Park and the need to undertake detailed surveys.

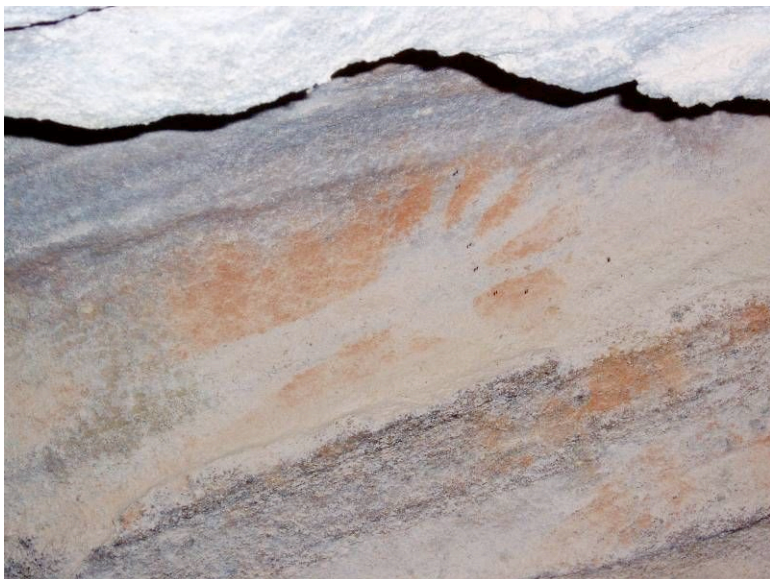


Figure 13: This newly discovered red hand-and-arm stencil is from one of the GBMWA's earliest pigment phases (photo by Paul S.C. Taçon).

The Taçon-Brennan team's main objective was to record in detail two shelters with a number of rare charcoal drawings discovered by bushwalkers in March 2005, to survey for further sites and to take Aboriginal and DEC staff to a creek system a few kilometres from Eagle's Reach. The Kelleher-Macqueen team was to survey a ridgeline to the south, where other bushwalkers recently found a solitary engraving. It was their mission to re-locate the engraving site and then to survey as much of the ridge as possible for other cultural heritage sites. All objectives were achieved by both teams with much new information about the Aboriginal use of this part of Wollemi National Park obtained.

In the creek area an extremely old site, at least 4000 years of age, was located. It consists of 15 faint red hand or hand-and-forearm stencils and is similar to other sites thought to be among the oldest surviving rock art sites in the greater Sydney region. This new discovery significantly adds to our knowledge of the distribution of these sites.

The two charcoal drawing sites were found to contain 30 and 50 images, most in good condition. There is a rare striped animal resembling an extinct thylacine, macropods, quolls and geometric motifs in the first shelter while the second has a lengthy eel-serpent figure associated with 16 flying foxes, human figures in ceremonial poses, abstract symbols and possibly a depiction of a woman giving birth.



Figure 14: Part of a panel of 50 drawings recently discovered in Pinchgut Creek (photo by Paul S.C. Taçon).

The Kelleher-Macqueen team located 47 sites, including 39 with rock art and one, possibly two, with scarred trees. Their most significant discoveries were a shelter with an in situ complete hafted stone axe and the largest engraved platform in the

Greater Blue Mountains World Heritage Area. The stone axe head has two long wooden handle shafts and binding resin. Although borers have degraded part of the wooden handle shafts it is the first time a *hafted* axe has been found in situ anywhere in the Greater Blue Mountains Area and possibly even in the greater Sydney region. The vast majority of hafted stone axes in museum collections were obtained through trade, as gifts or as commissioned objects from Aboriginal people in the 1800s or early 1900s. The find compliments a wooden firestick located by our team in another shelter in 2003. These wooden objects, some art designs and the scarred trees suggest Aboriginal people were using the area well after the arrival of Europeans in NSW, at a time when Sydney was experiencing early rapid growth 65 kilometres away.



Figure 15: Matthew Kelleher with the rare in situ hafted axe (photo by Tristram Miller).

One of the activities people may have been engaging in when they visited this part of the Wollemi was ceremony, along with associated trade, meeting and sharing between various groups. This is indicated by the nature of the rock art, especially the newly discovered engraving site. It contains extremely significant imagery similar to some of the most important sites elsewhere in the Wollemi and closer to the coast. There are human figures that resemble Biami and Daramulan, two of the most important Ancestral Beings for Darkinjung, Darug, Wiradjeri and other groups, a human figure grabbing a life-size kangaroo, another figure grabbing a wombat, a large eagle or eagle-human, a life-size dingo, koala-like figures and many other significant designs. The wombat and the eagle have drawn counterparts at the nearby Eagle's Reach Shelter, brought to world attention in 2003, but are



extremely rare elsewhere. The engraved platform, named 'Gallery Rock', is unlike any other petroglyph site in the GBMWA and is in a remarkably good state of preservation.



Figure 16: Arriving at the large engraved platform found in September 2006 (photo by Tristram Miller).



Figure 17: One of several 'emu women' depicted at the engraving site (photo by Paul S.C. Taçon).



Figure 18: A large Baiami figure was engraved at the platform as if reaching up to grab a life-size wombat (photo by Paul S.C. Taçon).

### Trip 3

In December 2006 Taçon, Darkinjung Sites office Dave Pross and others escorted leading world rock art expert Dr. Jean Clottes to dozens of sites across the GBMWhA and the central coast. Clottes was recently appointed to UNESCO to advise the institution on the creation of a World Heritage Rock Art List. He was so impressed with the GBMWhA rock art sites, and associated contemporary Gundungurra, Darug, Wiradjuri and Darkinjung stories that he considers the Area to have world Heritage significance. Indeed, it was the living connections to the sites and larger landscapes that most impressed him. Unfortunately, a planned visit to Gallery Rock, the engraved platform discovered in September, was cancelled at the last minute due to a massive bushfire threat.



Figure 19: Gundungurra elder Mary King with leading world rock art expert Jean Clottes at Bora Cave, Blue Labyrinth area (photo by Michael Jackson).

#### Trip 4

From 9-14 April 2007 we deployed a research team to a remote part of Wollemi National Park in order to scientifically record Gallery Rock, the large engraved rock platform discovered by the Landscape of Blue Mountains Rock-Art team in September 2006. This fieldwork is part of a long-term rock art recording program, *The Landscape of Blue Mountains Rock-art*. The April 2007 team consisted of four individuals of Aboriginal descent, including Dave Pross from the Darkinjung Local Aboriginal Land Council, non-indigenous archaeologists/recorders and a journalist.

The platform is about the size of half a football field and contains ten discrete panels with figurative engravings and/or grooves. Another area, in a creek bed immediately north of the main platform, has a cluster of 15 axe grinding grooves. Sixty-two rock markings were recorded with drawings, photography and precise measurement, including 42 figurative motifs, sixteen axe grooves and four spear sharpening grooves. Most figurative motifs are close to life size, with a range of animals, human-like figures and Ancestral Beings depicted. There are male and female human-like figures, macropods, birds, eels and a rare engraved wombat. Some of the male figures appear to be reaching up to or grabbing hold of a bird, a macropod and the wombat. Two compositions appear to show dingos hunting. In one, a life-size dingo is chasing a large macropod and a duck. In the other the front half of a dingo was depicted in a pouncing pose near a small animal, possibly another duck.

Most importantly, there are numerous depictions of the key Ancestral Beings of the region: Baiame, Daramulan (Baiame's son), and Eagle-Hawk, as well as what may

be Daramulan's wife, other emu-women, and an evil being known as Club Foot Man. As eels are associated with or are considered manifestations of the Rainbow Serpent this Being may also be represented. In one composition a male figure reaches up with one arm to grab a circle while a crescent shape lies near his feet to the other side. This may relate to a widespread story of Baiame reaching up to the sun to bring light into the world before riding through the Milky Way in his canoe. A superb representation of an eagle lies between another depiction of Baiame and one that may be of Daramulan in profile. There also are two large human-eagle engravings, appearing to show states of transformation. No other rock art site in southeast Australia has all of these key Ancestral Beings in the one place. However, all who have visited the site conclude it is an unrestricted teaching site as it does not have the hallmarks of a male initiation site, such as human-like (Baiame) footprints.

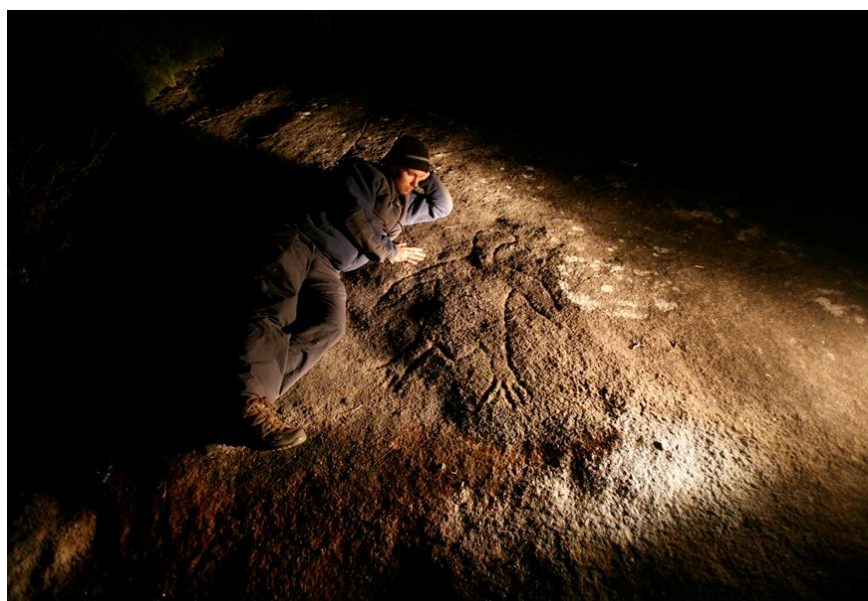


Figure 20: Matthew Kelleher next to a life-size eagle engraving, Gallery Rock (photo by Tristram Miller).

Besides recording the platform in detail, dead tree branches were removed to lessen the impact of future bush fires on the site. A scarred tree and a number of small rock shelters with white hand stencils (both those of children and adults) and charcoal drawings of human figures and macropods close to the three main approaches to the site were also recorded, confirming the interpretation of the site as a teaching place open to all ages. A day of survey by part of the team also led to the discovery of three sites not previously located.

As the main party departed by helicopter three bushwalkers who are part of the larger research team were flown in. They successfully charted a north-south travel route to the Mt. Irvine engraved complex and discovered a number of previously unrecorded red stencil, white stencil and charcoal drawing sites in the process. Among other things, this further highlights the great potential the area has for previously undocumented cultural heritage sites.

#### Trip 5

Five more figures were discovered at Gallery Rock on 30-31 May 2007. At that time Taçon, Brennan and Kelleher escorted Teresa Gay and other indigenous staff of the New South Wales Department of Environment and Climate Change (DECC) to the site.

#### Trip 6: A Planned July 2007 Expedition

From 16-19 July 2007 members of several Aboriginal communities will visit Gallery Rock with Taçon and Brennan to share stories, songs and dances associated with the imagery and to perform ceremonies. One elder, the last to know the Wiradjuri Eagle song, first recorded but not published in the late 1800s, intends to sing the song he believes is associated with the site and area. A documentary film-maker will record the larger event.

### **4. Discussion and Significance of Newly Discovered Wollemi Sites**

The Environment Protection and Biodiversity Conservation Act 1999<sup>2</sup> sets out that “(2) A place may be included in the National Heritage List only if the Minister is satisfied that the place has one or more National Heritage values. A place that is included in the National Heritage List is called a “National Heritage place.”

Section 324D of the Environment Protection and Biodiversity Conservation Act sets out the “Meaning of National Heritage values” as

*“(1) A place has a National Heritage value if and only if the place meets one of the criteria (the National Heritage criteria) prescribed by the regulations for the purposes of this section. The National Heritage value of the place is the place’s heritage value that causes the place to meet the criterion.”*

For a place to be inscribed on the National Heritage List it must meet one or more of the criteria set out in Section 324D<sup>3</sup> (see below) and be of “outstanding heritage value to the nation”. In deciding if a place meets the criterion of “outstanding heritage value to the nation” one needs to define what of “outstanding heritage value to the nation” means in reference to the values that are being assessed.

For something to be of “outstanding heritage value to the nation” it must be an integral part of the Australian story<sup>4</sup> and be part of what gives Australia its national

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<sup>2</sup> In Conservation of biodiversity and heritage Chapter 5, Protected areas Part 15, Managing National Heritage places Division 1A, Subdivision B, section 324C of the Environment Protection and Biodiversity Conservation Act 1999 (Com).

<sup>3</sup> In Conservation of biodiversity and heritage Chapter 5, Protected areas Part 15, Managing National Heritage places Division 1A, Subdivision B, section 324D of the Environment Protection and Biodiversity Conservation Act 1999 (Com).

<sup>4</sup> <http://www.nationaltrust.org.au/NationalHeritageSystem.htm> accessed 8/7/2006.

identity<sup>5</sup>. These places must be distinguished from places that are of local, regional or state significance only.

Places of local, regional and state significance are places that contribute to our understanding of the local, regional or state area. These places are integral to the story of the development of the area's identity and character.

The act also specifies what Indigenous heritage value of a place means. It is the heritage value of the place that is of significance to indigenous persons in accordance with their practices, observances, customs, traditions, beliefs or history.<sup>6</sup> As can be seen below, this is true not only for certain Wollemi sites but also much of the Greater blue Mountains World Heritage Area.

#### *Eagle's Reach in Comparison to Sites Elsewhere*

In terms of sheer number of motifs, Eagle's Reach is the ninth largest of the over 5,000 known sites from the greater Sydney Basin – Blue Mountains Area, with all the rest in Darkinjung localities. But many of these sites consist primarily of stencils. For instance, at Yengo-1 418 of the 505 motifs are stencils, while 37 are engravings. In terms of numbers of drawings, Eagle's Reach ranks fourth, with only Swintons, Upside Down Man and site 45-2-0189 having more.

If we compare Eagle's Reach to outstanding sites elsewhere – in terms of preservation, number of motifs, number of image layers, range of subject matter, nature of subject matter, contemporary indigenous significance – it ranks among the best across Australia. For instance, using these criteria it outranks or is comparable to the best sites of most small regions (such as the Keep River Region, NT; Uluru, NT; Riversleigh-Boodjamulla [Lawn Hill}, Queensland; and any part of Victoria, Tasmania and South Australia). It also is comparable to some of the better sites of Cape York (Qld), western Arnhem Land-Kakadu (NT) and the Kimberley (WA), although these large and dense rock art 'provinces' have many such shelter sites. Of course, the Eagle's Reach subject matter is very different from that found at northern sites, reflecting the local Wollemi environment and local cultural concerns. In this regard it is all the more important as such sites are extremely rare in southeast Australia. Indeed, in this regard Eagle's Reach is the best surviving example.

#### *Eagle's Reach significance*

Eagle's Reach, one of the most significant rock art shelters of southeast Australia, lies in a remote and rugged part of Wollemi National Park, about 65 kilometres from downtown Sydney. Incredibly, it was not discovered until October 1995, when four hikers chanced upon it. Our team of archaeologists, indigenous community members and students undertook the first scientific assessment and

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<sup>5</sup> <http://www.deh.gov.au/heritage/national/index.html> accessed 8/7/2006.

<sup>6</sup> Chapter 8, Part 23 Definitions, Division 2 General list of definitions of the Environment Protection and Biodiversity Conservation Act 1999 (Com).

documentation of the site in May 2003. It was named Eagle's Reach at this time because of a prominent eagle depiction in the centre of the shelter. We recorded 206 individual motifs altogether, consisting of 166 drawings, 39 stencils and one painting, arranged in twelve superimposed layers. One of the special features of the site is the large range of Wollemi animals drawn with great skill and accuracy. Another is the many rare motifs, such as animal-headed beings with human bodies and animals holding artefacts. The main eagle depiction originally was drawn in charcoal, then had white artefact stencils placed over the wings. It later was re-outlined in white, with piercing eyes added. The result is a powerful image of a key Ancestral Being, according to Aboriginal elders. The oldest part of the eagle, in charcoal, may be as much as 1600 years of age. The white outline is recent, perhaps added only a couple hundred years ago. Given the many layers of imagery at Eagle's Reach, it obviously was important for many generations of Aboriginal people to visit and mark this incredible terrain with symbols of group and individual identity. For contemporary Aboriginal people the shelter is considered a teaching site associated with the Eagle Ancestor, long used by many different groups.

Although the rock art resembles that produced by Darkinjung people at other sites more than that of other groups, it appears that Wiradjuri and Darug people also visited and made stencils if not drawings at the site. Indeed, the site is located near the boundary or junction of the traditional territory of these three groups. The site may have been an important stop when journeying across the Wollemi, it may have been a meeting place and it likely had many spiritual associations given the large number of depictions of Ancestral Beings. Each time a group visited stories were likely told, more images were added and the history of the place became richer. Unfortunately, we will never know the details of the site's use nor the wonderful stories that must have been told about it. However, because of the stone artefacts and hand stencils of all sizes, including those of children, it appears the site was not restricted to men, women or knowledgeable elders. Instead it is likely family groups camped briefly at the site, sometimes leaving new rock art behind in the process.

Our research has shown that Eagle's Reach is not an isolated location but rather an integral part of a network of dozens of sites. Aboriginal individuals and communities agree that it has long been a focal point within the landscape. For them, it is interpreted as a teaching site associated with the Eagle Ancestor (Figure 22) shared by many groups of people speaking various languages. Today it is considered one of the most important sites of the region that reflects many aspects of south-eastern Australian Aboriginal identity, a key Eagle Ancestor site but also a place with depictions about ceremony, totemic relationships, other Ancestral Beings, oral history, local ecology, social relationships and individual experience.



Figure 21: The main eagle depiction at Eagle's Reach. For aboriginal community members the fact that it appears to be holding artefacts indicates it is an extremely rare depiction of the Eagle Ancestor (photo by Paul S.C. Taçon).

*Gallery Rock, site connections and cultural landscapes*

Other sites we discovered in the vicinity of Eagle's Reach include open lithic scatters, shelters with lithics, and in one case a wooden fire stick, axe grinding groove clusters, open engraving sites and both large and small shelters with pigment art (stencils, drawings and paintings). Many sites contain components of what is at Eagle's Reach, as well as other sorts of imagery. A vertical engraving site with 172 designs, most of which are large bird tracks, has a mineral crust lying over some of the art. This revealed a minimum age of 2000 years using AMS radiocarbon dating (more details can be found in Taçon 2005b; Taçon *et al.* 2003; Taçon *et al.* 2005; Taçon *et al.* 2006; Taçon *et al.* in press). To date we have located and documented a large complex of sites within the vicinity of Eagle's Reach, a second complex to the immediate south and a third to the west, on the other side of the Wollemi. These and other clusters of sites are linked by ridge tops and creek lines, with a few intervening rock art sites in between.

The Gallery Rock site is one such place linked to many others. It consists of an engraved platform located in an area of spectacular scenery. It is situated in a saddle of a major ridge line, with peaks on either side above. It is bordered by a small hanging swamp so that water runs across the platform in dry conditions and the top of the site forms a large waterfall during heavy rain. It is very much a



liminal part of the landscape. This, combined with its geology, makes it ideally suited as a place for rock art of outstanding spiritual significance. It has more images than any other engraving site in the GBMWA and is among the larger sites of the greater Sydney region. But no other location in southeast Australia has all the major Ancestral Beings of the region depicted in the one place. And there is no comparable site anywhere in Australia that contains all the key Ancestral Beings of a particular Aboriginal group. In this regard it is highly unique and of outstanding national significance.



Figure 22: Sally May and Paul Tacon document an engraving of a transforming eagle-human figure by placing red rope in the grooved outline at night, April 2007 (photo by Tristram Miller).

GBMWA Aboriginal communities regard Gallery Rock and Eagle's Reach to be part of the Eagle Ancestor landscape, a place of high spiritual significance for men, women and children of several language groups. The sites are considered meeting and teaching places, where story telling, song, dance and ritual ceremony would occur. It also is considered a meeting place for Ancestral Beings and is as significant as Mt. Yengo, where Baiame stepped off the Earth into the sky (also in the GBMWHA), or any other location in New South Wales but is not a restricted men's or women's business locality.

### **5. An Indigenous perspective on the GMBWHA Rock Art and its Contemporary Cultural Significance** (text by Graham.King; edited by P. Taçon)

From the view of Wiradjuri Peoples, the traditional Aboriginal rock art, particularly in the western and northern sections of the Greater Blue Mountains World Heritage Area, illustrates knowledge about the Burbung ceremony. It also indicates spiritual knowledge about Aboriginal kinship systems through the totems, iconography and motifs that have been found.

Aboriginal culture is alive and well in the Greater Blue Mountains World Heritage Area. Today the largest Aboriginal communities in Australia live in the cities and towns surrounding this region. The Greater Blue Mountains World Heritage Area caters for much of the spiritual and cultural healing for these large communities, with thousands of Aboriginal people from the inner city of Sydney connecting with it. As well, most Aboriginal peoples living in the regions surrounding the Greater Blue Mountains World Heritage Area have cultural connections to the Aboriginal language nations and peoples belonging to this region. Often they come together for ceremony.

Aboriginal Ceremony has been practised continually in this region since time immemorial, with the oldest indications to the immediate west at Lake Mungo, NSW where cremated burials and burials with red ochre have been dated to at least 43,000 years ago (Bowler *et al.* 2003; Thorne 1971; Thorne *et al.* 1999). The two main Aboriginal ceremonies of the region are the Bunan and the Burbung and are two distinct classes of cultural heritage related to natural environmental heritage. Aboriginal people of the Burbung include the Wiradjuri, Wonarua, Kamilaroi and Darkinjung, all of whom have very close cultural connections with the Darug. The Darkinjung and Wiradjuri Burbung ceremony was watched and recorded by early settlers at Wallerawang and in the Wollemi section of the World Heritage Area (eg. see Mathews 1897). Kamilaroi peoples have been observed in the northern sections of the World heritage area doing Burbung with Wiradjuri, Wonarua and Darkinjung with Darug participants.

The Burbung began with Byamee (The All Father) who with his wife, who has emu totem, created all the Aboriginal people. They both came down from the Creator Beings. Through the ancient Aboriginal peoples and Byamee all the landscapes were formed through the process of naming the world. It is believed by Aboriginal peoples that by the naming of landforms and creatures, those creatures and landforms come into being. The Great Creator brought law to all Aboriginal peoples by tying them to the Marrathabung (the 'Dreaming' or all that is) through the Burbung ceremony. In other words, ceremony tied the people to Byamee, law and land.

The Burbung is an Aboriginal men's initiation ceremony in which young men go through the law of Byamee. The participants of this ceremony are part of the Wiradjuri /Kamilaroi kinship system of Ippai/Ippatha, Murri/Martha, Kabi/Kabbitha, Kumbu/Butha. Two major Aboriginal kinship anomalies exist. For Wonarua and Darkinjung instead of Murri they are of Bya and for the eastern Wiradjuri instead of Kumbu/Butha they use Wombee/Wombeyan kinship names. In many parts of the ceremony sequence Aboriginal women must be and are involved. Fire, water, earth, and wind are important elements in the ceremony and are symbolised in many parts of the Burbung. Aboriginal kinship relations are reflected in the performance of the Burbung and are accentuated for the participants of the ceremony.

Large events such as the Burbung involve the Aboriginal fire smoking ceremony, which is still practised by Aboriginal communities today. Gum leaves, and leaves from other native species of the country around where the ceremony is taking place, are placed around a sacred fire today in two groups of four, towards the directions of the four winds, or in a circle. People are then smoked into the land. Before the smoking ceremony Aboriginal law business takes place where all concerns of all participants are expressed. People introduce themselves to all the Aboriginal communities participating in the sacred fire and water ceremonies. Actions are decided on by each Aboriginal community involved in the ceremony. After all business concerns are decided, leaves are placed on the sacred fire for smoking of all the participants. Every community is in unity with each other through the ceremony which, just as in the Burbung itself. During the Burbung magic feats are performed by the clever men (spiritual leaders or ‘Men of High Degree’) encouraging positive energy among the participants.

The totems play an important part in the sacred fire and water ceremonies of Aboriginal communities. Each Aboriginal community aligns with the directions of their totem and country around the sacred fire. Food is the most important aspect of the ceremony where personal totems are observed. In the Burbung, Aboriginal people are smoked so they can hunt meat (tjinga), such as grey kangaroo and emu. They are smoked into the totemic group to which they belong, such as the eagle totem, dingo totem, kangaroo totem, snake totem, goanna totem, lyre bird, skink and gecko. The rock art found in pristine shelters, such as Eagle’s Reach, may indicate which Aboriginal totem groups attended the ceremonies. They could enhance how Aboriginal people perform the sacred fire and water ceremonies today. The rock art in Wollemi National Park also is consistent with how Aboriginal people do the sacred fire and water ceremonies today. For instance, the direction of the main Eagle at Eagle’s Reach and the one seen at Aboriginal ceremonies today is the same.

The Greater Blue Mountains World Heritage Area motifs, totems and iconography are of World Heritage significance as they reflect key Aboriginal cultural ceremonies of national and international historical importance and assist with their survival. The European occupation in the Greater Blue Mountains World Heritage Region has greatly devastated Aboriginal culture. Many diseases were introduced through animal and human contact. Wars and massacres affected many Aboriginal peoples during the colonisation period. Traditional Aboriginal foods were killed off and not replenished, causing starvation. After this period Aboriginal people were forced to live under the protection of the Aboriginal Protection Board. Many Aboriginal people were forced to live on Aboriginal reserves. Aboriginal peoples under the various regimes of Aboriginal protection authorities were forced not to speak and teach Aboriginal language and culture to the children. Over 100,000 Aboriginal children in New South Wales were taken away from Aboriginal families and communities by the Aboriginal Protection Board and later the Aboriginal Welfare Board. Despite the holocaust upon Aboriginal peoples that has occurred in this region, Aboriginal culture is still alive and well today. The Greater Blue

Mountains World Heritage Area is of importance to Aboriginal peoples reconnecting with Aboriginal culture, with the rock art discoveries integral to this process.

For research on the Burbung ceremony of the Wiradjuri, which is also shared by the Wonarua, Darkinjung, and Kamilaroi peoples, places such as the Eagle's Reach site, Dingo's Lair and Emu Cave in Wollemi National Park are providing high degrees of cultural heritage information. This information is vital to the survival of Aboriginal ceremony and culture in most Aboriginal communities in New South Wales. The images in the Eagle's Reach shelter illustrate most of the totem kinship archetypes who attend the Burbung of the Wiradjuri, Darkinjung and other Aboriginal language nations. Images of Aboriginal totems, iconography and motifs of the Bunan ceremony, such as near the Jenolan Caves, to the south, are preserved in Aboriginal rock art shelters as well.

Through the Mapping Country research in the Blue Labyrinth area of the Blue Mountains National Park, south of Wollemi, hundreds of other Aboriginal cultural places are being recorded, preserving cultural heritage history which is in danger of damage by natural environmental processes and exposure to modern human activities.

For instance, sites are threatened by an increase in the frequency and intensity of wildfires, due to climate change, and both the fires and efforts to control fires can damage or destroy rock art sites. By locating and mapping sites they can be catered to as part of fire management strategies.

Natural landforms and natural heritage form a major part of Aboriginal cultural heritage in the Blue Mountains World Heritage Area. The Three Sisters site in Katoomba is the Blue Mountains World Heritage Area's most well known Aboriginal cultural site. It consists of seven ironstone pillars; three are large and are the older sisters and four smaller pillars are the younger ones. There are many Aboriginal Dreaming stories for this site, such as the Three Sisters story and the Seven Sisters story. Both these stories are related in many ways and are about showing how all Aboriginal peoples are related to the land, the sky world and to all other peoples of the earth. In Aboriginal cultural beliefs all peoples of the earth are related through the seven sisters who are of the Pleiades and their suitor who is of Venus and the seven honourable brothers from the belt of Orion. Three and a half million people per year visit this site, making it the second most visited tourist site in Australia. The Eagle and Emu story encompass the Seven Sisters story, showing the creation of all the birds and their special relationship to the creator. The sites 'Emu' and 'Eagle' occur as two natural rockforms. There are the Lyrebird and Creator Aboriginal sites with more eagle stories at places such as Blackheath and Leura. There are Emu and Lyrebird sites where there is metamorphosis of lyrebird totem people to emu totem people, changing from having small feet to big feet and, because of this, having more family and community responsibility and influence. Byamee rockforms, Eagle rock forms and rockforms of Byamee's wife are exhibited throughout the World Heritage Area. Gurangatch created the

Megalong valley, one of the largest valleys in the country. Goanna beings and Rainbow Serpent beings created natural features such as the Walgan and Colo rivers in Wollemi National Park. Many aspects of this creation are reflected in the rock art sites, re-enacted in ceremony and passed down to younger people through story, song and dance. Archaeological research is both reaffirming and strengthening these Aboriginal cultural connections and identity for contemporary Aboriginal people.

Wollemi sites, including those with rock art, are currently being further interpreted from Darug, Darkinjung, Kamiloroi and Wiradjeri perspectives but all agree major Dreaming tracks run through the GBMWA. Darkinjung, for instance, see many links between individual sites in Wollemi National Park and the central coast of New South Wales, not only in terms of iconography but also the relationship of landforms, geography and traditional stories.

## **6. Comparison of Rock Art figures in the Sydney Basin and the GBMWA**

To develop a framework for the GBMWA the BMWHI utilised information from various sources such as *The Landscape of Blue Mountains Rock-Art* Project, data imputed from AHIMS site cards for the GBMWA, data from PhD research (Officer 1998; McDonald 1994) conducted in the surrounding area. As can be seen in Table 1, the results indicate that GBMWA contains over 18% of the identifiable surviving rock art imagery of the greater Sydney region and in some cases 50 - 90% of particular image types (e.g. birds, various types of tracks, mundoes). However, this analysis was undertaken before recent *Landscape of Blue Mountains Rock-Art* research results were available so it is table 3 GBMWA numbers and percentages are minimal. Consequently, the GBMWA actually conserved a much greater portion of the larger region's rock art as well as that of specific motif types.

	Conserved within the GBMWA	WHA	SYD Basin
Man	15.12%	116	767
Woman	16.59%	36	217
human figure	0.00%	0	31
Anthropomorph	16.77%	158	942
Profile anthropomorph	24.28%	42	173
Culture hero	32.58%	29	89
Indeterminate figure	44.21%	84	190
Macropod	16.58%	262	1580
Snake	12.69%	34	268
Other land animal	20.78%	212	1020
Emu	16.49%	31	188
Bird Figure	81.03%	47	58
Other bird	20.29%	124	611
Fish	0.89%	10	1125
Fresh water turtle	0.00%	0	4
Eel	3.61%	13	360
Whale	0.00%	0	105
Other marine animal	4.02%	8	199
Shield	1.00%	3	299
Boomerang	8.55%	50	585
Axe	6.70%	24	358
Other material object	14.08%	88	625
Hand	8.37%	414	4948
Human foot (mundoe)	57.72%	157	272
Hand variation	7.61%	47	618
Roo track	50.27%	186	370
Emu track	67.98%	138	203
Bird track	68.09%	764	1122
other tracks	90.91%	20	22
Circle	8.79%	40	455
Complex-non-figurative	22.94%	64	279
Contact motif	2.30%	2	87
Other	13.22%	48	363
Indeterminate motif	0.00%	0	753
Unidentified open	16.13%	417	2585
Unidentified closed	9.60%	641	6675
Total Indeterminate	10.58%	840	7943
Total identifiable	18.43%	2361	12810

**Table 3 - Results of comparative analysis of motif frequency in the GBMWHHA and the Sydney basin. (Hooper 2006)**

### **7.0 Conclusions and Comparison of the GBMWHHA to other regions**

The GBMWHHA contains a diverse body of cultural heritage sites, especially rock art. In many ways it reflects the cultural heritage of the highly developed, urbanised Sydney basin but retains numerous pristine/undisturbed sites in wild or 'natural' settings. In terms of rock art, influences from the Woronora to the south, the Hunter and central coast to the northeast, Kamilaroi country to the north/north-west and Wiradjuri country to the west can also be detected. Some early influences from the far northwest or even central Australia can also be detected (e.g. the pecked bird and the Emu Cave tracks). This makes it a unique 'junction' or cross-roads type Area, very different from any other part of Australia with rock art. It also is one of the few well-preserved Areas with both lengthy engraved (petroglyph) and pigmented (pictograph) traditions. Furthermore, there is extensive oral history that relates to landscapes, places, sites and images and numerous contemporary Aboriginal connections. The Eagle's Reach and Gallery Rock sites with extremely rare eagle depictions and other major ancestral Beings (engraved and in pigment) are especially important in this regard.

The GBMWHHA was used and marked with rock art long after the spread of Europeans across New South Wales and much rock art appears to have been retouched in the past 200 years. At two sites extremely rare wooden objects were located since 2003: a firestick at one locality and a hafted stone axe, complete with wooden handle and resin, in another. The complete hafted stone axe is the first ever to have been found in southeast Australia as usually only the stone head or stone fragments survive. These finds compliment other wooden objects found in the GBMWA in the past, including a shield found in the late 1800s now in the Australian Museum collection. In most other parts of Australia it is no longer possible to find evidence of indigenous wooden material culture so the GBMWHHA stands out in this regard.

As can be seen above, in the past few years each field expedition to Wollemi National Park or other parts of the GBMWHHA has led to highly significant discoveries. The September 2006 Wollemi trip has revealed some of the most profound to date and helps us to better place the Eagle's Reach site in landscape, regional and ceremonial perspectives. Research has been limited by time, weather and minimal financial resources but spectacular results have been achieved through the enthusiasm of volunteer indigenous and non-indigenous participants. However, in order to best document, understand, conserve and manage the cultural heritage of the Greater Blue Mountains World Heritage Area, and especially Wollemi National Park, urgent attention needs to be directed towards the procurement of more adequate future resources. Indeed, given that cultural heritage research has only just scratched the surface of many parts of the GBMWHHA, such as Wollemi National Park, there are likely hundreds or thousands more sites still to be located and documented. Given that a recent analysis based

on data available in 2005 concluded the GBMWHa conserves at least 18% of identifiable rock art imagery across the GBMWHa- Sydney basin region future research may well show the figure is 30% or greater. This and the fact that GBMWHa sites generally are in better condition than Sydney sites is one of the many reasons the Area is deserving of placement on the National Heritage List. It is always difficult to compare the rock art of different countries or the rock art of different regions within a country. In many ways, it is like comparing different cultures, each has its own unique features and each is a valid entity. Certainly some regions are more prolific and/or outstanding than others and in Australia most people think of the northern part of the country in terms of outstanding rock art, archaeology, traditional knowledge and cultural heritage more generally. The Pilbara, Kimberley, Kakadu-Arnhem Land and Cape York regions are the main regions most people think of in terms of outstanding rock art, and Kakadu is World heritage listed. Central Australia is also often considered as a region of highly significant indigenous cultural heritage. In southeast Australia only the Sydney basin commonly occurs in lists of regions with great Australian rock art but it is now a highly urbanised landscape and many sites have been lost or are threatened. The GBMWHa contains a significant representative sample of Sydney Basin rock art and cultural heritage as well as examples from other nearby southeastern areas (table 3). In this way it stands out as a truly special region, as important as the above mentioned areas of northern Australia (e.g. see table 4). This is especially so given that there are still widespread indigenous connections to places across the GBMWHa and varying levels of contemporary knowledge, meaning and relevance despite over 200 years of intense cultural change.



Figure 23: Jody Cameron (Darkinjung Local Aboriginal Land Council) at Eagle's Reach, April 2005 (photo by Paul S.C. Taçon)



**Table 4 - Rock Art Analysis in Relation to National Heritage List Criteria**

Criteria	Dimensions
(a) its importance in the course, or pattern, of Australia's natural or cultural history	<ul style="list-style-type: none"> <li>• Shows a number of distinct styles in area</li> <li>• Shows a documented relationship between styles and changes in the natural or cultural environment</li> </ul>
(b) it possesses uncommon or rare aspects of Australia's natural or cultural history	<ul style="list-style-type: none"> <li>• Demonstrates that the dating of styles coincides with chronology of changes in natural and cultural environment</li> <li>• Demonstrates evidence for developing cosmologies or beliefs</li> </ul>
(d) its importance in demonstrating the principal characteristics of: (i) a class of Australia's natural or cultural places; or (ii) a class of Australia's natural or cultural environments	<ul style="list-style-type: none"> <li>• Has several panels of paintings or engravings that clearly depict unusual themes or images, such as composite creatures, key Ancestral Beings (Darramulan, Baiame, Eagle-Hawk, etc.) eagles, wombats, dingos and other rarely depicted creatures</li> <li>• Has the only (or some of the few) examples known of a rare tradition, style, technique, or method (e.g. Gundungurra sub-style)</li> <li>• Includes most of the characteristics of a defined tradition</li> <li>• Includes a specified minimum number of rock-art sites and a specified minimum number of individual images</li> </ul>
(e) its importance in exhibiting particular aesthetic characteristics valued by a community or cultural group	<ul style="list-style-type: none"> <li>• Demonstrated Aboriginal interests in art</li> <li>• Visitor numbers to the sites/area increasing</li> <li>• Has representation of images in published works on rock art</li> </ul>
(f) its importance in demonstrating a high degree of creative or technical achievement at a particular period	<ul style="list-style-type: none"> <li>• Includes images of outstanding technical quality</li> <li>• Have outstanding examples of artistic skill and detail</li> <li>• Have excellent examples of graphic design and composition</li> <li>• Are exceptionally well preserved</li> </ul>
(i) its importance as part of the developing traditions and	<ul style="list-style-type: none"> <li>• Ethnographic evidence for cosmology and its links to art</li> </ul>

customary law of indigenous people

- Ethnographic evidence for intangible values associated with the rock art and/or its landscape setting.

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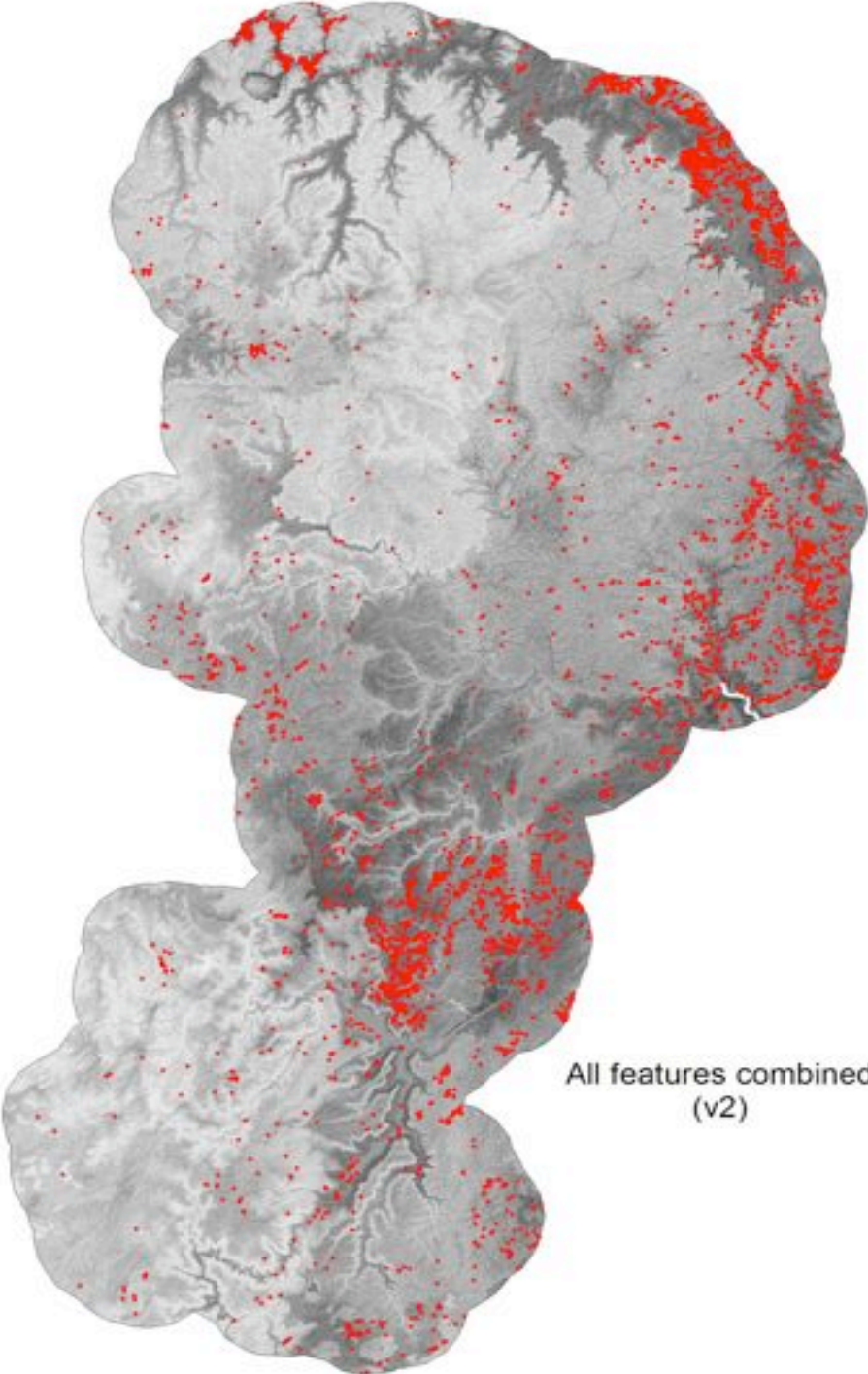
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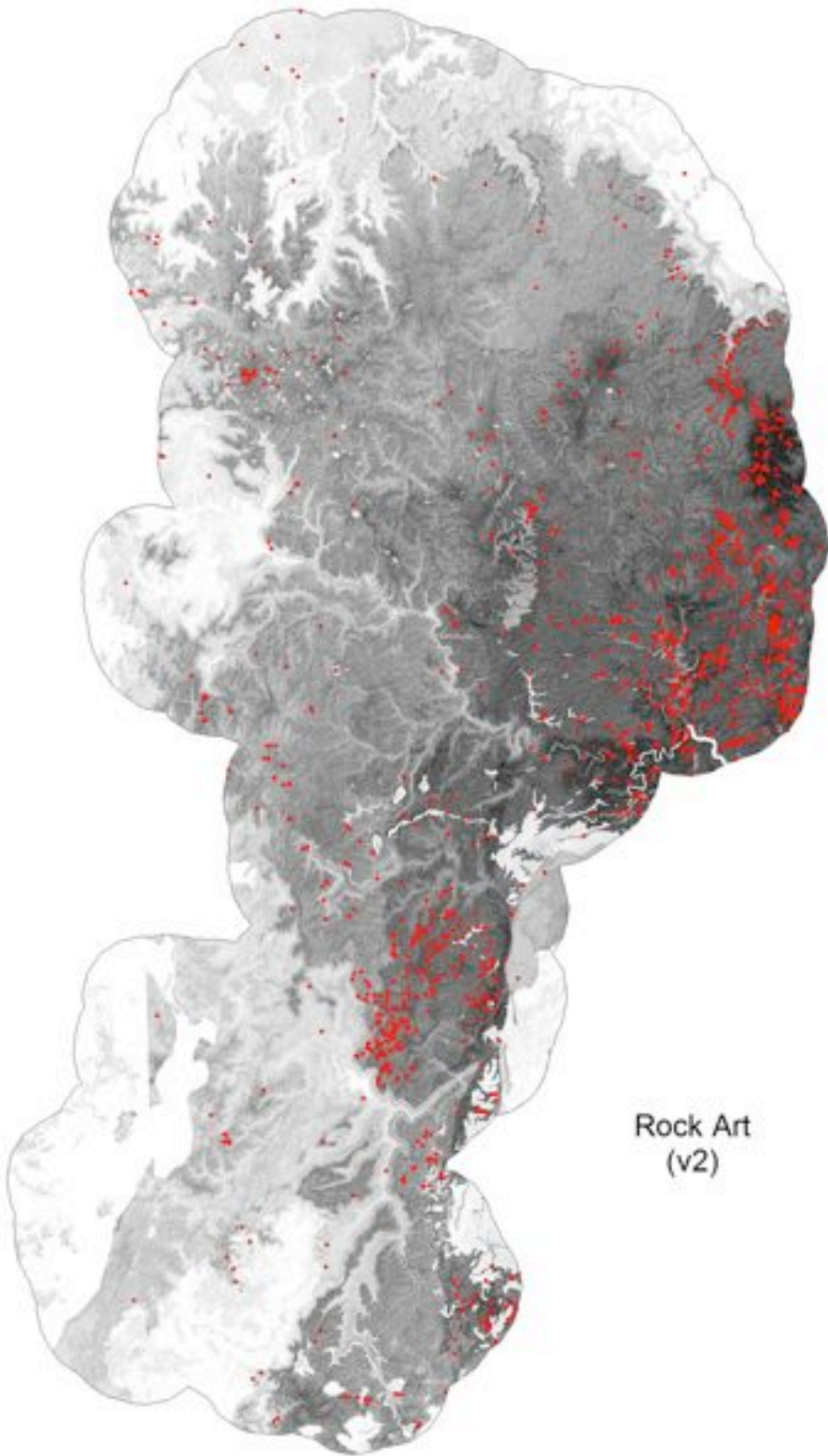
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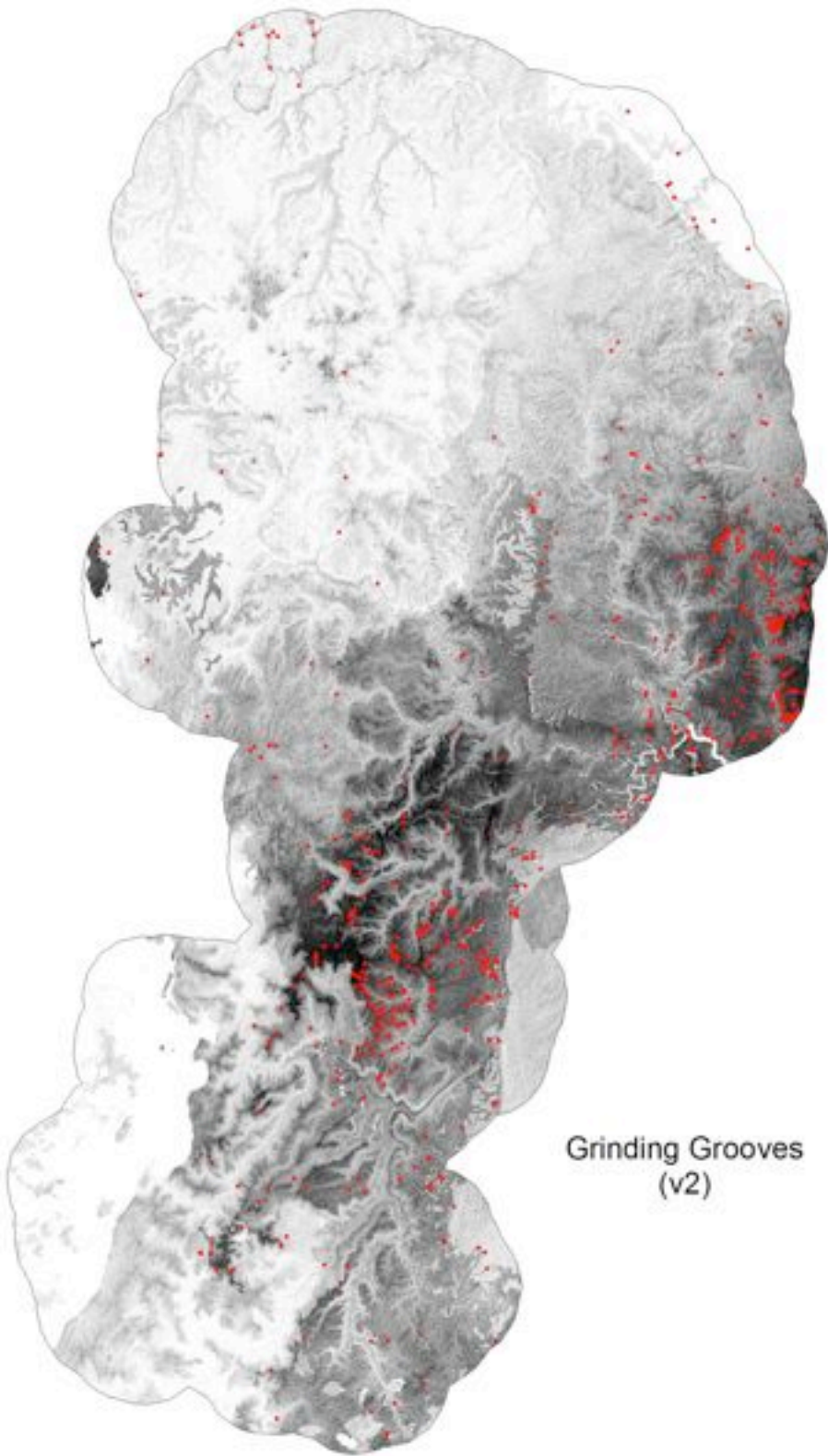
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**Appendix 1. Distribution of Aboriginal Heritage Sites within the GBMWA (AHIMS Data)**



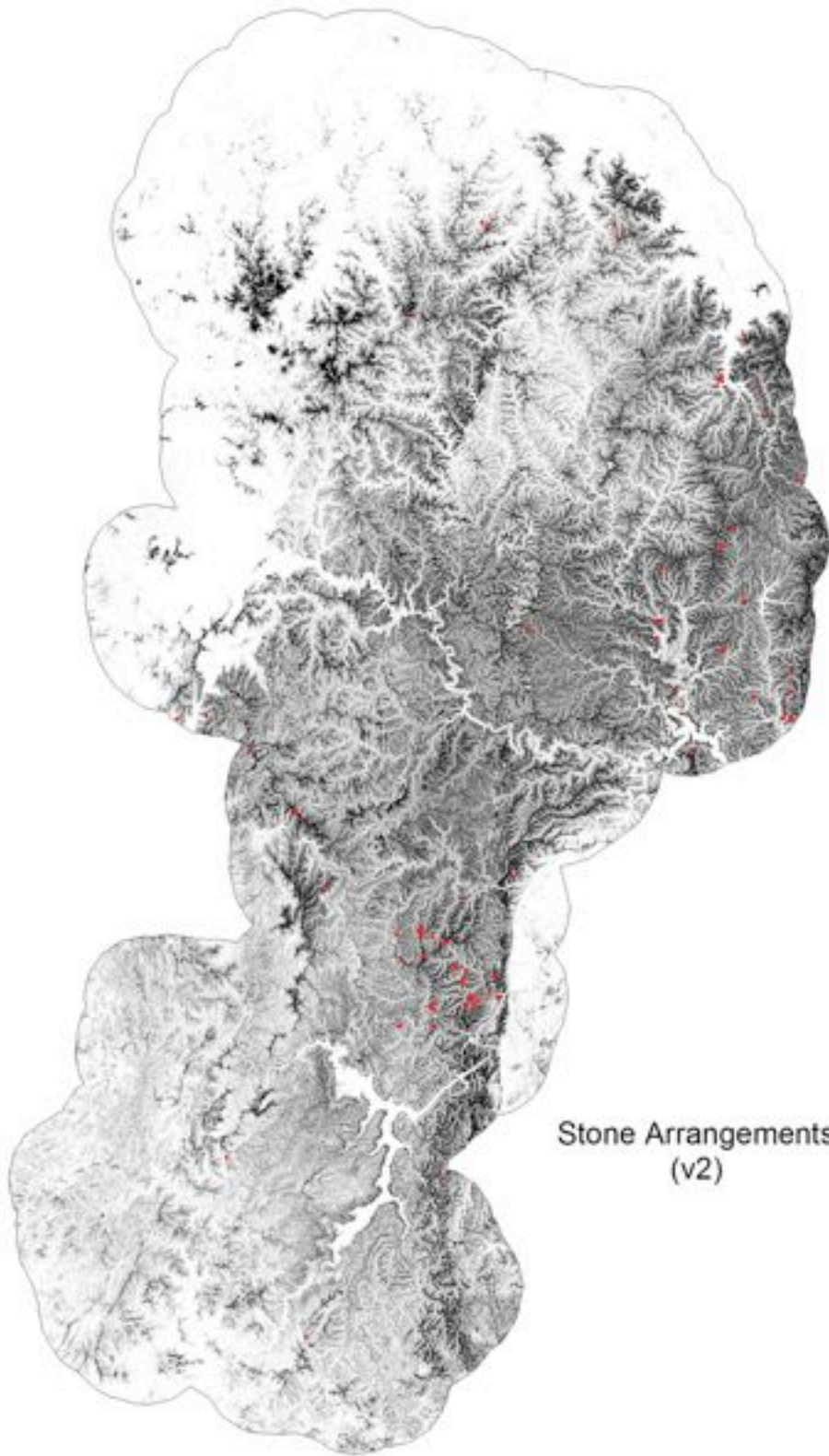


Rock Art  
(v2)

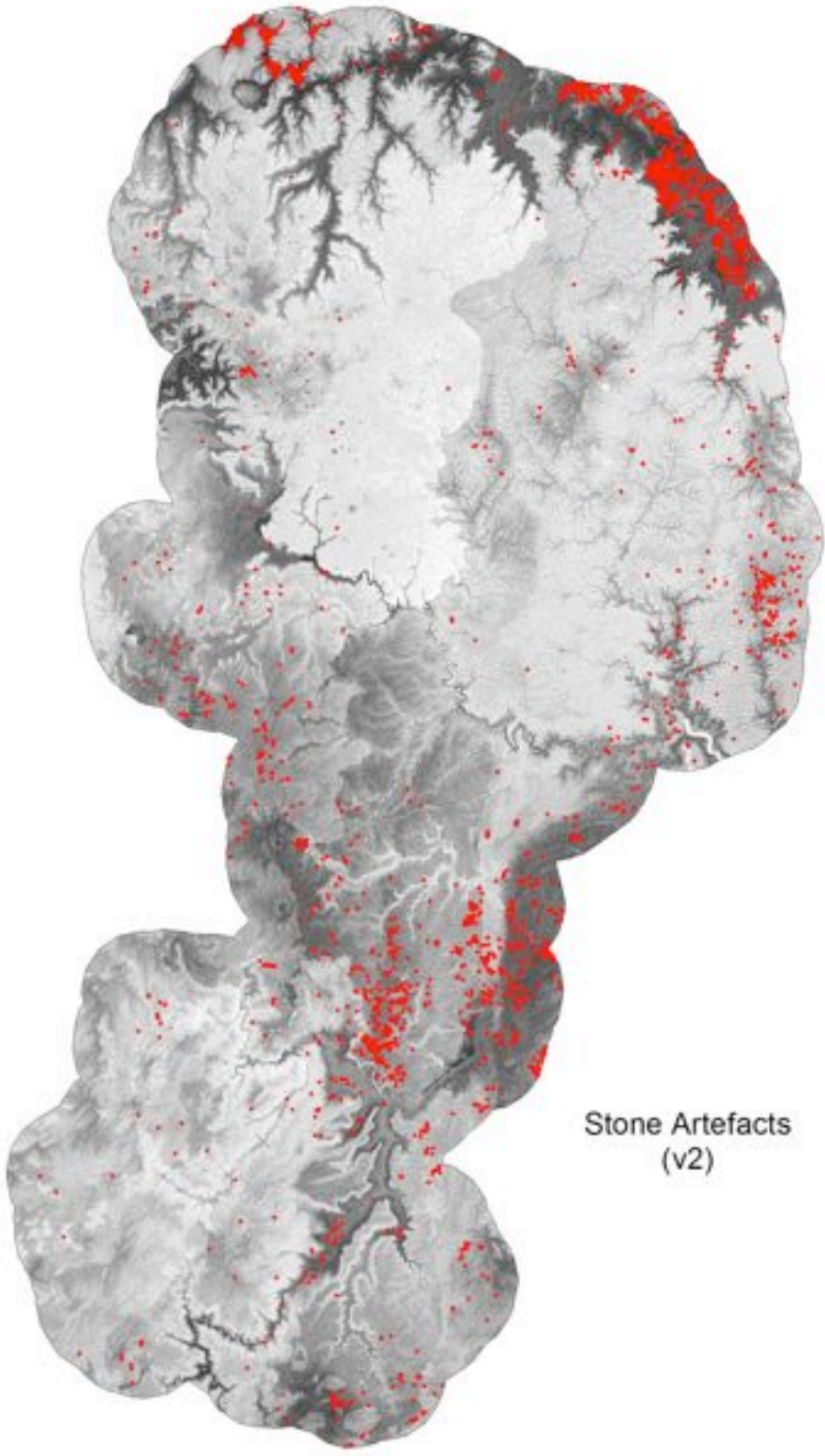


Grinding Grooves  
(v2)





Stone Arrangements  
(v2)



Stone Artefacts  
(v2)