

Part of a panel of paintings at Gibb River in the Kimberley. A small Wandjina head is surrounded by numerous snake heads, said to be the children of the great rock python (above). The rock python at Gibb River. Its mythological role is comparable to other giant dreamtime snakes, usually called `rainbow serpents' (top right).

THE WRITING ON THE

Come and tour W.A. s magnificent outdoor galleries. Your guide, Howard McNickle, has visited all the major rock art regions in Australia, and carried out detailed recording in the Pilbara, W.A., and the Victoria River District (adjacent to the Kimberley) in the Northern Territory. He has worked as a consultant with the Northern Territory Museum of Arts and Sciences.



Photography: Howard McNickle





W.A. has some of the world's most outstanding and varied rock art. The ancestors of the present day Aboriginal inhabitants left a priceless legacy on rocks at many thousands of sites throughout the State. Two major rock art regions are recognised in W.A., each displaying completely different techniques and styles.

In the Kimberley there are many places where large areas of sandstone have been dissected by watercourses to create overhanging rock shelters. These shelters provided ideal camping and occupation sites, especially during the wet monsoon period and wherever the surface is suitable, and were often decorated with paintings, many of considerable size and complexity.

Due to the remote nature and sparse population of the Kimberley, only a small percentage of the existing rock art has been recorded, but it is obvious that marked changes in painting style are found throughout the region. In the West Kimberley, the dominant and most impressive paintings are the 'Wandjina' figures, a

distinct style of painting in which large figures, usually human but frequently also snakes, crocodiles or other animals have been painted onto a prepared 'whitewashed' background. This painting style disappears towards the east and is replaced by different styles including large colourful figures of contorted and snakelike beings. These changes in style continue from the Kimberley through the Victoria River District of the Northern Territory where many very large human and animal figures are also to be found, and to Arnhem Land, where there is a great variety of styles, including the wellknown 'X-Ray' paintings.

Pilbara

Well to the south of the Kimberley region, and separated from it by the Great Sandy Desert, lies the second of the major rock art regions, that of the Pilbara. The geology of this region is totally different and a different type of rock art evolved. Sandstone is virtually absent from the Pilbara. Rock shelters and occasionally quite deep cavelike recesses do occur in the banded iron formations of the Hamersley Ranges, but the shelter walls are usually rough and blocky and rarely suitable for painting. As a result, the artists found another medium: numerous outcrops of dark rocks, mainly granite and dolerite. The hard surface of these rocks have a dark brown to black 'patina' of iron oxide as a result of weathering over a long period of time in the arid climate. This coating, however, is quite shallow and can be abraded or pounded off by the use of stone tools to reveal the light coloured undersurface. By this method an engraving with a strong colour contrast can be created. Weathering to the original colour or 're-patinating' takes place at an extremely slow rate so that an engraving can be expected to remain visible for thousands of years even when totally exposed. This type of high contrast figure is quite rare in other engraving regions of Australia, but throughout the Pilbara, the number of engraved figures would certainly run into hundreds of thousands and quite possibly to millions; no doubt the world's greatest concentration of 'petroglyphs'.

Outcrops along the coast and various offshore islands harbour many outstanding sites, due to the suitabality of the marine environment for occupation with its abundant food sources. Concentrations of important sites are also to be found among the granite outcrops of the Upper Yale and Upper Shaw river basins.

Interpretation of Rock Art

The Wandjina paintings of the West Kimberley are perhaps the best known and the most impressive of Australian rock art styles. These paintings represent expressions of continuing religious beliefs of Aboriginal tribes of this region. The painted figures, usually depicted on a prepared white background, represent the resting places of spirit beings who are responsible for thunder, lightning and the coming of the annual monsoonal rains, vital for the continuation of vegetation growth and consequently, sources of food and game. The well-known stylised human figures, faces of which are portrayed with head halo, eyes and nose but no mouth, have been regularly re-painted until recent times. At sites in which snake or crocodile figures are also painted in the same style, aboriginal informants maintain that these animals are also the Wandjinas and are as important as are the human figures. The most common interpretation is that the spirit beings travelled for long distances and 'painted themselves onto the walls' of the rock shelters which they now adorn. Analysis of small samples of painted pigments have shown that up to 25 separate layers of paint have been laid down at some sites.

In addition to the Wandjina paintings, numerous paintings in other styles, presumably much older, are also found in the Kimberley region. These earlier, usually more weathered paintings are sometimes found at the same sites as the Wandjinas, often having been superimposed upon by the latter. Present-day Aboriginals usually claim that the earlier figures are not important to their culture and often state that these other paintings were done by 'the old people in the places where they camped', an explanation also commonly given by traditional custodians in other regions of northern Australia.

It is believed that only a small fraction of the rock art sites of the Kimberley region have yet been recorded, and it is likely that less than 10 per cent of the total number of sites would be of importance to present day communities. As to the age of the earliest paintings, there is no reliable method of dating rock art unless it is found to be associated with datable archaeological layers, but one particular style of small thin monochrome animated figures known as 'Bradshaw figures' found on durable rock faces may well date to thousands of years.

In the Pilbara region, where engraving is the dominant rock art technique, a wide variety of styles and age differences are also clearly present. In contrast to the Kimberley, however, the



entire body of rock art can be described as pre-historic, for even the clearest and seemingly most recent of the engraved figures have no meaning to living Aboriginals.

When asked for information concerning the figures exposed on the rocks the elders have stated that even their own grandfathers did not know when the engravings were made or what they were supposed to mean. It can only be assumed that whatever significance the engravings possessed to the artists who made them has now been lost in antiquity. One exception is the Yapurarra tribe who made the Burrup engravings and were — as legend has it killed in a massive war a few hundred years ago. There is also some conjecture that their art contained European figures —possibly French explorers.

There is some evidence that rates of patination of rock surfaces (i.e. formation of dark iron-oxide coating) may have been considerably greater during the period when the Pilbara climate was even more arid than it is today, namely prior to the end of the last ice age. Therefore, some of the repatinated early outline figures could easily have a minimum age of 10000-15000 years.



Stylised human figures, commonly in red and white, plus a white outline figure of a fish. This is typical of the East Kimberley sites (above).

This magnificent Wandjina head has been superimposed onto an earlier smaller head of similar style. Close to these paintings are a cluster of mud building swallows' nests. These nests plus insect nests threaten rock painting sites (below).



Some Pilbara engravings still visible today may date from the first artists, perhaps even from its first occupation by humans. Animals now known to be extinct have been depicted in engravings, and such figures do not always display total re-patination.

Figures which clearly resemble the thylacine or Tasmanian Tiger, extinct on the mainland for some thousands of years, have been found and numerous early outlines of a kangaroo possessing a fat tail, a characteristic not found in any present day species, have also been found throughout the Pilbara.

In the inland and northern areas of the Pilbara, a series of quite distinctive styles has developed. There are the high contrast, usually unpatinated figures of the more recent traditions. These figures are usually fully engraved rather than outline, although outlines of the recent style do occur, often partially filled in or internally decorated with bars or spots. Stylised human figures tend to dominate, although animal and bird figures are also common, often being assailed by spears or boomerangs.

A particular variety of figure now known as 'Woodstock figures' after Woodstock Station where they were first recognised is the most unusual.

Woodstock figures are distinct from other styles of human figures in that they are normally long and flexible with arms, legs and bodies oriented randomly, sometimes inverted, while hands and feet are commonly represented as a two-toed fork. Unlike most human representations in Aboriginal rock art, Woodstock figures are frequently depicted in profile in which the head is normally given a protruding forked muzzle and one or two long antennae-like decorations. The significance of these agitated figures will probably never be known with any certainty but throughout the far northern Australian painting regions, from the Kimberley through the Northern Territory and into Cape York in Queensland, paintings of contorted, animated or inverted beings are often described by Aboriginals as 'sorcery' figures or 'devil' figures, painted for purposes of evil magic, presumably serving the same purpose as bone pointing.

Preservation

Unlike the more familiar forms of art, which are housed and protected in galleries or private residences, rock art is subject to attack from the very day it is completed. The most serious threat to the majority of rock art sites is weathering. At painting sites, there is the additional threat of water, construction of bird and insect nests, and occupation of shelters by animals. In a few instances, sites are also threatened by human activities and in some cases by vandalism.

Up until the 1960s the remote nature of the Pilbara and the small population meant that human activity posed little threat to the rock art of the region. More recently, however, the development of the iron ore and other mining industries, the establishment of towns and the building of roads, railways and port facilities has had a considerable effect on the environment. Unfortunately, during the early years of development, few environmental guidelines were in force and guite serious destruction of sites did occur, particularly in development of port facilities. Fortunately more stringent rules are now in force and mining companies etc. generally take a more

responsible attitude to preservation of the environment, but the growing centres of population, the need for recreation and the availability of 4WD transport means that visits to sites by unsupervised parties are more likely to take place.

Public Access

Experience with rock art sites such as those at Carnarvon Gorge in central Queensland, which have long been accessible to the public. has shown that even though vandalism was common during the years up until the 1970s, in recent years, since the sites have been developed and literature made available to visitors, vandalism has become extremely rare, even though visitors are not normally supervised. Those who appreciate the art for its value are certainly likely to hold the same respect for any further rock art which they may encounter. Therefore, with the increasing likelihood of unsupervised visits to rock art sites, especially in the Pilbara, it may well be advisable to open a few selected sites to public access with explanatory signs or literature so that a general public awareness of the priceless heritage of the original inhabitants may be aroused.

It is rather ironic that many millions of dollars are spent in building art galleries to protect and display modern works of art and to purchase art as great cost, much of which is appreciated by a select few, while the vast collection of outdoor art galleries in their natural settings are left to deteriorate, mostly without even a photographic record having been taken. Unlike vegetation and wildlife, which are increasingly conserved and protected, the destruction of rock art is a one way process. When it is gone it is gone forever.





In the most recent painting of the Wandjina figures, simply the head or the head and upper part of the body is represented.

The Museum's Role

Aboriginal sites and objects in W.A. are protected under the Aboriginal Heritage Act 1972-1980, which is administered by the Trustees of the W.A. Museum. Sites and objects located on land vested in the National Parks and Nature Conservation Authority and the Lands and Forest Commission, and managed by CALM, are subject to that legislation.

The oldest style of Pilbara engraving is that of deeply abraded outlines, usually of animal and bird figures or abstract designs such as concentric circles. These engravings usually display little or no colour contrast, having re-patinated to the original colour of the rock over a long period of time (Hamersley Range National Park) (above).

Some natural threats to rock art would be virtually impossible to prevent. This boulder, along with an impressive panel of figures, has completely split in two (top right).

The large flexible figure is a typical example of a 'Woodstock' figure. To its left is a much smaller example of the same style. On the boulder in the left foreground is an engraved panel. (below).





Landscope

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Editorial

W.A. is a vast, sparsely populated State, and it is not uncommon to hear some parts of it described as 'the last frontier'. But there are few, if any, parts of W.A. that have not been affected by European settlement.

Evidence of western civilization in some of the most remote areas is far too often the empty can. But even where there are no obvious traces, the effects have been profound.

There is compelling evidence, for example, that the displacement of Aboriginal communities from much of inland W.A. — and the subsequent removal of Aboriginal firing practices — is directly responsible for major changes in vegetation, which in turn has resulted in the virtual extinction of many native animals.

It is not always easy to pick the effects of European civilization on the natural environment even when the history is well-documented. This *Landscope's* account of the woodlands around Kalgoorlie talks about the often horrific environmental damage, but an observer of these woodlands today would have difficulty recognizing that vast areas were clearfelled less than 50 years ago.

While the concept that we should 'let nature do its thing' has superficial appeal, the reality is that the purity of nature has been, and will continue to be, distorted by human presence. We have no option if we want to sustain the unique ecosystems of W.A. but to apply management principles.

The history and management problems of Benger Swamp, which feature in this edition, illustrates two fundamental points. Firstly, even the most disturbed areas of W.A. can make a major contribution to conservation. Secondly, we must be careful not to change a system that works even though the way it works may not be 'natural'.

As complex and as difficult as the task of understanding ecosystems is, the social and political factors which influence the type of management that can be applied are often more difficult to deal with.

The key to good management is an understanding of the processes that drive the ecosystem. Once we understand what the natural processes are, we can then devise management systems which will mimic them.

The only way to ensure that rational decisions are made on environmental management is to provide the facts.

COVER PHOTO

Just when you thought you had seen every angle on our State symbol, photographer Jiri Lochman surprises you with a fresh perspective.