

## **SUMMARY OF THE AUSTRALIAN HERITAGE COUNCIL'S PRELIMINARY ASSESSMENT OF POSSIBLE NATIONAL HERITAGE VALUES IN THE WEST KIMBERLEY**

The Australian Heritage Council (AHC) in its preliminary assessment decided that parts of the west Kimberley region might have outstanding Indigenous, historic and natural heritage value to the nation. The Council found that areas in the west Kimberley might have National Heritage values for:

- demonstrating the pattern of Australia's natural and cultural history;
- possessing uncommon aspects of Australia's natural or cultural history;
- yielding information contributing to the understanding of Australia's natural and cultural history;
- demonstrating the principal characteristics of a class of Australia's natural or cultural environments;
- exhibiting particular aesthetic characteristics valued by a community or cultural group;
- demonstrating a high degree of creative or technical achievement at a particular period;
- having a strong or special association with a particular community or cultural group;
- having special associations with the life or works of a person or group of importance in Australia's history; or
- their importance in Indigenous tradition.

### **The pattern of Australia's natural history**

The spectacular folds, faults, domes and ridges of the King Leopold Range, Fitzroy Uplands and Yampi Ridges, are the result of three major geological events that took place between 1870 and 560 million years ago, when the Kimberley was a separate landmass that collided with other landmasses that now make up the western and central parts of Australia. The collision, which threw up massive mountain ranges, occurred at a time when life was yet to emerge from the sea and colonise the land, and Earth's surface looked very different. These events shaped the ancient Australian continent and helped build the dramatic landscape of the Kimberley today.

River valleys that cut through the fossil reef system at Windjana and Geikie gorges give scientists a unique window onto changing reef environments of the Devonian period, 410–360 million years ago – the previous great coral reef-building age. Twenty million years of continuous coral reef deposition is recorded in the Devonian limestone of the northern Lennard Shelf, which includes the Oscar, Napier, Emmanuel and Pillara ranges. These deposits span a global mass extinction event. The Kimberley is one of only four places on Earth with evidence for survival of coral reefs during this period.

Many species of fish lived in the lagoons and tropical shelf environments of the Kimberley Devonian reefs. These are preserved today in the Gogo fossil sites, acknowledged as one of the world's most important early vertebrate fossil localities for the number of fossil species found and the anatomical details preserved. The deposits contain fish that were ancestral to the first limbed vertebrates (or tetrapods), which eventually evolved into amphibians, reptiles, birds and mammals.

The west Kimberley is biologically rich, with the highest diversity in the Kimberley occurring around the Mitchell Plateau and Drysdale River areas. The region is important as a biological refuge, where plants and animals have survived changing conditions through the physical and ecological evolution of northern Australia in response to plate tectonics, climate, invasive species and human impacts. Contemporary refugia, such as the Kimberley, can be regarded as 'natural laboratories' for the study of ecological and evolutionary processes. The coast and islands, vine thickets, mangroves, karst areas and northern and western rivers are particularly important for protecting species and ecosystems which are rare, unknown or threatened elsewhere.

### **The pattern of Australia's cultural history**

Shell beads recovered from archaeological deposits in rock shelters in the remnant Devonian Reef provide evidence of Aboriginal economic and social networks operating in the Kimberley for at least 30,000 years ago. The symbolic application of ochre to a rock surface in Carpenter's Gap 1 rock shelter has been dated to more than 39,700 years ago; the earliest evidence for 'art' in Australia.

Kimberley pearl shell, an important and powerful material in Aboriginal culture, was the most widely distributed commodity in Aboriginal Australia; transported via trade networks to locations as distant as Queensland and eastern South Australia.

In 1688, William Dampier, a member of the crew of the ship *Cygnets*, stayed at Karrakatta Bay for more than six weeks, longer than any previous European mariners. Dampier's published accounts of his travels around the world, which included observations at Karrakatta Bay, helped stimulate European interest in the Pacific and Australia, and shape late seventeenth and eighteenth century attitudes towards Australia and its Indigenous people.

Fossil Downs station in the west Kimberley was the eventual destination of the longest driving journey in Australian history. From 1883 to 1886, members of the MacDonald and MacKenzie families drove cattle over 5,600 kilometres from Goulburn in New South Wales to what is now known as Fossil Downs station.

In the 1890's Jandamarra and the Bunuba Aboriginal people's intimate knowledge of the rugged Oscar and Napier Ranges was crucial in their struggle to resist European pastoral settlement and expansion.

For fifty years, Bungarun (Derby Leprosarium) operated to isolate and treat Aboriginal leprosy patients. Bungarun provides an ongoing testament to Aboriginal people's resilience and capacity to adapt and survive despite the difficulties and personal suffering imposed by leprosy, separation from country and family, and the isolationist policies of the government of the day.

The dispute at Noonkanbah station in 1978–80 between Aboriginal people, mining companies and the Western Australian Government over oil drilling in an area sacred to Traditional Owners was a pivotal event in the struggle for Aboriginal people to have their rights to practice law and culture recognised, and determine what happens on their traditional lands.

### **Rare or uncommon aspects of Australia's natural history**

The Gogo fish fossil sites reveal remarkable preservation of a rich and diverse late Devonian fish fauna. Entire skeletons, complete with extensive soft tissue structures, have been carefully unearthed by palaeontologists. This unusual evidence for the structure of soft tissue has allowed the reconstruction of features like muscles and provides evidence for the earliest live birth.

The Broome Sandstone preserves the only extensive evidence of dinosaurs from the western half of the Australian continent. Tracks made by a number of different dinosaur species are preserved in mid-Cretaceous sandstone at Gantheaume Point.

### **Rare or uncommon aspects of Australia's cultural history**

The extraordinary preservation of plant remains in the archaeological deposits in Carpenter's Gap 1 rock shelter provides rare evidence of Aboriginal plant procurement strategies and adaptation to changing resources over 40,000 years, contributing to our understanding of the impact of climate change on the ecology and the technological responses of Aboriginal people.

William Dampier and the crew of the *Cygnets* camped and lived at Karrakatta Bay when the ship was careened for over six weeks, the longest duration of the few seventeenth century European landing places known on the coast of Australia.

The *Mermaid* Tree at Careening Bay provides rare physical evidence of the charting of the Kimberley coast by Phillip Parker King, one of Australia's most important early marine surveyors. Members of King's crews carved the name 'HMC Mermaid' and the date '1820' on a large boab tree while the ship was careened there.

### **Potential to yield information that will contribute to an understanding of Australia's natural history**

The fossil reef system of the Lennard Shelf dates from 390–370 million years ago and spans a time in the Earth's history when there were mass extinctions of marine species across the planet. Investigation of these reefs allows scientists to see how reef communities in the past reacted to rapid biological, climate and sea level changes, key issues facing major reef systems of today, such as the Great Barrier Reef. These deposits provide one of the few rich fossil records in the world that span a mass extinction boundary and are important in testing theories of ecological collapse and recovery.

With major technical advances, the Gogo fish fossil sites continue to reveal more exciting information about the evolution of early vertebrates. The superb preservation and lack of deformation of fish fossils allow scientists to test new techniques, which may be applicable to other fossils and sites in the future.

### **Potential to yield information that will contribute to an understanding of Australia's cultural history**

Recent research in the Kimberley linking comets and tsunamis to Indigenous oral histories and painted rock images provides opportunities for future collaborative investigations between archaeologists, geologists and Traditional Owners, which has the potential to yield significant information on the nature and the effect of mega-tsunami events.

The archaeology of the west Kimberley also has the potential to yield important new information on early human settlement of Australia; Aboriginal lifeways over 40,000 years, and perhaps even earlier; and the interactions between Aboriginal people and visitors from South-East Asia before European settlement.

The exceptional illustrative nature and diversity of the west Kimberley rock paintings may provide important new insights into the impacts of climate change, species extinction, Aboriginal material culture and technology development, and the interactions between Aboriginal people and outsiders before European settlement at a level of resolution currently absent from the archaeology.

On the basis of archaeological finds at Dirk Hartog Island, the landing place of William Dampier and the crew of the *Cygnets* at Karrakatta Bay, the west Kimberley may have archaeological remains which could shed light on Australia's seventeenth century maritime history.

Archaeological investigations at Careening Bay, where in 1820 Phillip Parker King and his crew careened the ship *Mermaid*, may also reveal material associated with this event and contribute to a greater understanding of the work of one of Australia's most important nineteenth century coastal hydrographers.

### **Importance in demonstrating the principal characteristics of a class of Australia's natural environments**

The spectacular west Kimberley coast (from King Sound near Derby to Bonaparte Gulf near Wyndham) is perhaps the longest stretch of predominantly rocky coast in Australia. It is a drowned river landscape spanning over 2,500 kilometres of intricate headlands and archipelagos, deep bays, impressive tidal effects and magnificent waterfalls, undisturbed by major coastal infrastructure.

A Devonian marine system encompassing reefs built on a continental shelf can be seen in the sediments and geomorphology of the Lennard Shelf, represented in the present day landscape by the Oscar, Napier, Emmanuel and Pillara Ranges and their adjoining foothills and plains. These marine environments, including islands, reefs and lagoons, lay off the ancient shoreline, which is marked by the folded and faulted rocks of the King Leopold orogen. The Lennard Shelf of today reflects the topography of the ancient Devonian seafloor and its features and their spatial relationships provide an integrated picture of a tropical continental shelf environment from 390–370 million years ago.

A rare tropical example of an intertidal mudflat system, Roebuck Bay has the highest number of bird species of international importance visiting its shores of any site in Australia, due to the seasonally abundant nutrients it provides. Non-migratory breeding shorebirds also make Roebuck Bay home for part of the year.

### **Particular aesthetic characteristics valued by community or cultural group**

The west Kimberley is renowned for its dramatic and beautiful landscapes, including the towering cliffs, rocky headlands, sandy beaches, pristine rivers, spectacular waterfalls and thousands of islands of the remote sandstone coast. Inland lies the rugged Kimberley plateau, with its deep gorges and cascading waterfalls, the striking King Leopold Ranges, and Windjana and Geikie gorges, which cut through the limestone of an ancient coral reef.

Painted images in rock shelters and caves across the west Kimberley are a stunning visual record that is arguably unparalleled in Australia. The paintings are both powerful and of deep religious significance to the Indigenous Traditional Owners who continue to maintain and refresh the images as part of ongoing Aboriginal tradition.

### **A high degree of creative or technical achievement at a particular period**

Considered one of the longest and richest painted rock art sequences anywhere in the world, the west Kimberley complex of painted images represents an outstanding creative and technical achievement.

Memorable to locals and visitors alike, Aboriginal and Christian beliefs converge in the brilliance of the pearl shell interior of the Beagle Bay church, remarkable for its artistic excellence and technical finesse, and testimony to the ingenuity and resourcefulness of those who built and decorated it from locally sourced materials.

The double raft, *galwa* or *kalum*, of the west Kimberley is a unique technical innovation which allowed Aboriginal people to navigate the treacherous rips, whirlpools and massive tidal changes of the region, and travel to offshore islands and otherwise inaccessible coastal areas.

### **Association with a particular community or cultural group for social, cultural or spiritual reasons**

The west Kimberley has a special place in the minds of Australians for the region's colourful history of pearling on a remote frontier in the tropical north of Australia.

### **Association with the life or works of a person or group of importance in Australia's history**

William Dampier first made observations of Australia and its Indigenous people at Karrakatta Bay and the surrounding area. His accounts of Australia and his other voyages around the world established Dampier as an expert on the Pacific, helped to shape European understanding of Australia and its inhabitants, and influenced later explorers such as James Cook.

### **Importance as part of indigenous tradition**

The complex socio-religious beliefs and ritual practices of the Wanjina–Wunggurr people, established in the Lalai (The Dreaming), are central to their laws and customs and a system of exchange called the *wurnan*. There is no other Indigenous society in Australia where a single class of Creator Being, the Wanjina, depicted as a distinct rock art figure, has such a significant and multifaceted role or set of associated meanings and practices.

Unusual in Aboriginal Australia, the Gwion Gwion rock paintings are incorporated into the two distinctly different contemporary Indigenous belief systems of the Wanjina–Wunggurr and Balangarra people.

The riverine landscape of the Fitzroy River corridor is unique in its ability to convey four very distinct expressions of the Rainbow Snake story as part of an integrated Aboriginal cosmology that unites ten Aboriginal language groups along one tropical riverine system.