

Rock art reveals climate changes

50,000 years of history of humanity, spanning massive climate shifts, dramatic sea level rises and changes in flora and fauna is the only place in the world. Protecting this site is crucial to preserving culture for future generations.



Murujuga means "hip bone sticking out" in the Ngarluma-Yaburara language. It's located 1,300 km north of Perth, Australia, including the Burrup Peninsula and Dampier Archipelago. It is home to the Mardudhunera, Ngarluma, Wong-Goo-Tt-Oo, Yaburara, and Yindjibarndi peoples who have lived in this area for more than 50,000 years.

Murujuga is not only a significant cultural site for First Nations peoples but also a vital link to understanding Australia's ancient history and environment. Murujuga has over 2 million engravings (petroglyphs). This rock art provides valuable insights into how Australia's climate and environment have changed over millennia. It is the most continuous sequence of rock art in the world and one of the oldest, nearly as ancient as Spain's 66,700-year-old cave paintings.

The peninsula and surrounding islands were connected to the mainland until about 7,000 years ago when rising sea levels cut them off. This rise in sea levels (up to 130 meters) transformed the landscape and influenced the types of art created.

Researchers from the University of Western Australia and the University of Wollongong are studying rock art and the environmental changes in Murujuga and are using optically stimulated luminescence dating to measure how long ago the engravings were made by analysing the loss of electrons from the rock surfaces. Sediment layers in the area may also provide information about past climates and vegetation. The rock engravings depict both extinct species (like the thylacine and fat-tailed kangaroo) and modern marine life (like turtles and whales), showing shifts in the environment.

Murujuga is listed on the National Heritage List and is being considered for World Heritage status, but there are concerns that nearby industrial activities, such as emissions from a natural gas processing plant, could damage the rock art. The art is not only a historical record but also a living cultural heritage.

Sources:

- [Murujuga Aboriginal Corporation](#)
- [New Scientist](#)

Underwater archaeological sites



Scientists found ancient underwater sites off Western Australian coast, showing how people lived thousands of years ago before rising seas flooded their land. These discoveries rewrite history and call for action to protect Australia's amazing underwater heritage!

Around 2018, researchers uncovered culturally significant archaeological sites preserved on the seabed off the coast of Western Australia. This groundbreaking discovery provided new insights into the history of human habitation in Australia.

Sea levels were much lower for most of Australia's human history, with levels about 80 metres lower when people arrived around 65,000 years ago. During the last ice age, sea levels dropped to 130 metres lower than today. As the world warmed between 18,000 and 8,000 years ago, melting ice sheets caused sea levels to rise, flooding vast land areas. Tasmania became isolated from the mainland around 11,000 years ago, and New Guinea separated from Australia around 8,000 years ago. Approximately 2.12 million square kilometres of land on the continental shelf surrounding Australia was flooded, areas where thousands of generations of people lived.

The study involved a team of archaeologists, rock art specialists, geologists, and divers who worked with the Murujuga Aboriginal Corporation for over four years. Researchers used laser scanners and high-resolution sonar to survey the seabed, and scientific divers conducted underwater surveys to record and sample archaeological sites. Environmental data indicates these sites must be older than 7,000 years, predating their submersion by rising sea levels.

The findings challenge existing understandings of life and emphasise the importance of coastal and marine environments in human history. Many submerged sites are at risk from erosion and industrial activities, highlighting the need for better protection measures.

Policymakers are urged to reconsider approaches to protecting First Nations underwater cultural heritage to ensure these ancient sites receive appropriate protections. Researchers believe many more submerged sites have yet to be discovered, which could reshape our understanding of Australia's human past.

Sources:

- [Murujuga Aboriginal Corporation](#)
- [The Conversation](#)