

**Threats of biocorrosion moss and river erosion on megalithic sites in Long Pasia,
Borneo: A case study of petroglyph Narid Upai Semaring**

ABSTRACT

During ancient times, megalithic sites generally functioned for religious purposes, astronomy, burial monuments, symbols of a man's strength, and markers for land boundaries. Nowadays, megalithic sites have the potential to be used as locations for cultural and heritage tourism, particularly archaeology tourism. This indirectly shows that a megalithic structure is something of great value, especially from economic, historical, and cultural perspectives. Its existence is always relevant. Therefore, the originality of a megalithic monument's structure must be maintained and preserved from any threats of damage and destruction. Unfortunately, a megalithic structure often faces various threats of damage and destruction, be it naturally or from human activities. Hence, this study aims to examine the threat of natural damage through the process of biocorrosion river erosion on megalithic sites in Long Pasia, Borneo, focusing on the case study of petroglyph Narid Upai Semaring. Other than that, this study also suggests mitigation approaches that can be applied to overcome the threats. Insights from the observational data (photo documentation) through a series of field studies were used as evidence to explain the phenomenon under investigation. This research provides an in-depth insight into how the reaction between the natural environment (moss and river flow) and megalithic sites could change the physical structure of the site. The research finding not only contributes to our understanding of the damage mechanism to ancient artifacts, but it also has crucial implications for the protection, preservation, and management of historic sites in areas that are exposed to the process of biocorrosion and river erosion. The finding is expected to help plan proper preservation and conservation actions for megalithic sites particularly in Long Pasia and generally in Malaysia.