

# EXOKARST AND ENDOKARST FAUNA BIODIVERSITY AS THE BASIS OF CONSERVATION BIOLOGY IN GUNUNG SEWU WORLD HERITAGE GEOPARK

by Tatag Bagus Putra Prakarsa, Himatul Hasanah, Rizka Apriani Putri

## ABSTRACT

Indonesia is one of the countries that has the highest biodiversity wealth in the world. In fact, it is very possible to become a country with *the most diversity in the earth* if all its biodiversity can be known and maintained properly. This wealth is supported by climatic conditions and various landscapes owned by Indonesia. One of the unique landscapes that store high biodiversity and endemism is the karst ecosystem. In our country, there are many karst areas that stretch from the western end to the easternmost. There are two karst areas that represent tropical karst ecosystems, namely Gunung Sewu and Maros. Mount Sewu has the status of a World Geopark according to UNESCO. The biodiversity of karst ecosystems requires more attention because these ecosystems are very vulnerable to damage. Currently in various karst ecosystems there is massive damage, so it is feared that it will have an impact on the destruction of biodiversity there. The main objective of this research is to study Exokarst and Endokarst Fauna as the basis of Conservation Biology in Gunung Sewu World Heritage Geopark. The object of this study is fauna (vertebrates and invertebrates) in Gunung Sewu Geopark. This research site includes the ecosystem of Ngingrong Cave and its surroundings in the Gunung Sewu World Heritage Geopark Area. Field data collection of this research will be carried out from March to August 2023. Analysis of Biodiversity data consisted of faunal diversity expressed by the Shannon-Wiener index and Species richness with Margalef. Based on the results of the study, it is known that in the Ngingrong Cave area which is part of the Gunung Sewu Karst there are 1 species of fish, 14 species of Herpetofauna, 17 species of birds and 6 species of mammals. Aves are the group with the highest number of species while fish are the group with the least number of species

Kata Kunci: *Biodiversity, Fauna, Conservation Biology, Gunung Sewu*