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Introduction to the Amakusa Goshoura Geopark - field museum on the islands-

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¹Goshoura Cretaceous Museum

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Introduction

Goshoura archipelago is located on the southeastern coast of Amakusa Islands in Kumamoto Prefecture, and is surrounded by calm sea. Goshoura Island, the largest island in this archipelago, can be reached by variety of passenger boats or ferries from Amakusa Islands.

There are many important geologic aspects including valuable fossils of dinosaurs, mammals and mollusks in the Goshoura area. The Amakusa Goshoura geopark started in October 2009. There are over 40 educational spots for finding fossils in the area, a fossil park, a show-house of ammonite and others with plates for explanation, not to mention various dinosaur remains. Rare display of dinosaur and mammalian fossils and experience of shell fossils hunting in this island are attracting visitors. There are short trip programs giving elementary, junior high school and high school students hands-on experience in fossil identification and gathering. These programs for tourists, which include taking fossils, learning a traditional fishing method called tontoko-ryo and a home-stay plan. Amakusa Goshoura geopark presents nature in all of its coastal life and wonderful ancient life.

geology and fossils in Goshoura

The geology of the Goshoura Islands consists of Cretaceous and Tertiary strata. The Cretaceous strata are divided into the Goshoura and Himenoura Groups. The Goshoura Group which is composed of brackish and shallow marine siltstone and non-marine sandstone that are alternating with conglomerates and shale was mainly formed in the middle Cretaceous age (98 million years ago). Fossil remains of dinosaurs, turtles, crocodiles, fish, crustaceans, mollusks and plants have found there. Fossil remains of dinosaur were found at three horizons. Deep sea clay and shale alternating with some thinner sandstone of the Himenoura Group contain abundant remains of ammonite, large marine bivalves, seldom found fish and echinoderms. Based on the fossil zones such as ammonite fossil zone and radiolarian biostratigraphic zone, the age of the lower part of Himenoura Group is found in the late Cretaceous age (85 million years ago).

The Tertiary strata are divided into the Miroku and Hondo Groups. The sand and clay formations belong to the Tertiary system in Eocene (50 million years ago). In many cases these formations are fossiliferous with marine mollusks, foraminiferas and terrestrial mammals. The Akasaki Formation of the Miroku Group is of terrestrial origin and contains fossils of turtles and large terrestrial mammals, which hold the record for the oldest fossil in Japan. Hondo Group, which is composed of deep sea blackish clay with trace fossils.

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