

One of the largest karst groundwater systems in Japan with limestone caves. Habitat of many cave-dwelling animals

Akiyoshidai Groundwater System Groundwater System, Karst

Geographical Coordinates: 34°15'N, 131°18'E / Altitude: 80-425.5m / Area: 563ha / Major Type of Wetland: Groundwater system, karst / Designation: Special Zone of Quasi-National Park / Municipalities Involved: Mine City, Yamaguchi Prefecture / Ramsar Designation: November 2005 / Ramsar Criteria: 1



Akiyoshidai karst tableland



Greater Horseshoe Bat



Unique formation of limestone pools

General Overview:

Akiyoshidai, one of the largest karst topographies in Japan, is situated in central Yamaguchi Prefecture at the western end of Honshu. The karst tableland of Akiyoshidai spans an area of 13,000ha on a gently sloped plateau at an altitude of 300m. The Ramsar Site covers an area of 563ha with the groundwater system developed under the central part of the plateau including three caves, Akiyoshido, Taishodo, and Kagekiyodo. It is one of the unique Ramsar Sites that recognize a groundwater system as a wetland ecosystem.

Akiyoshidai was formed 350 million years ago when a coral reef became elevated as a result of orogenic movement. Subsequently, over a long period of time, the rainfall melted the limestone bed to shape the characteristic "Karrenfeld landscape", with numerous pinnacles of limestone and thousands of funnel-shaped dolines.

Groundwater System and the Caves:

The Akiyoshidai karst groundwater system was developed using the surface water gathered through the cracks and crevices in the limestone rocks. The groundwater system, as a whole, flows down from the northeast to the west into Koto River. It includes two major water

systems — Akiyoshido and Taishodo. Approximately 450 caves, varying in size, have been shaped around their basins. The Akiyoshido water system is the largest, with a total length of 10km and an area of 1,800ha. It occupies almost half of the entire Akiyoshidai Groundwater System.

Wildlife in the Caves:

Deep within the underground caves, there are many unique cave-dwelling animals. Some of them have lost their eyesight or pigmentation due to living in the darkness. Six bat species with a total population of 20,000 have been found in the cave, including Greater Horseshoe Bat and Eastern Bent-winged Bat. In addition, a variety of aquatic mollusk species are found in the groundwater.

Eco-tourism Attraction:

Approximately 900,000 tourists visit Akiyoshidai annually. An elevator and audio guides are available in Akiyoshido Cave. Visitors can enjoy unique and mysterious scenes such as a huge underground chamber 30m high and 20m wide, more than 500 limestone pools arranged like terraced fields, and an enormous limestone pillar 15m in height and 4m in diameter.

[Greater Horseshoe Bat (*Rhinolophus ferrumequinum*)] Greater Horseshoe Bat

is a cave-dwelling bat with a horseshoe-shaped leaf nose for echolocation. At night, they leave their caves to prey on insects and return at dawn. Once back in the caves, they hang upside-down from the ceilings to rest. Approximately 3,600 individuals inhabit the caves of Akiyoshidai.

Contact Information:

Mine City Office

<http://www2.city.mine.lg.jp/>

