

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



Eastern Bent-winged Bats



Unique formation of limestone pools

General Overview:

Akiyoshidai, one of the largest karst topographies in Japan, is situated in central Yamaguchi Prefecture in the western end of Honshu. The karst tableland of Akiyoshidai extends over 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 recognized a groundwater system as a wetland ecosystem.

Akiyoshidai was formed 350 million years ago when a coral reef rose by 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 by the surface water gathered through the cracks and crevices in the limestone rocks. The groundwater system, as a whole, flows down from northeast to west into Koto River. The

groundwater system includes two major water systems, namely the Akiyoshido water system and Taishodo water system. Approximately 450 caves varying in size have been shaped in their drainage area. The Akiyoshido water system is the largest, with a total length of 10km and an area of 1800ha. It occupies almost half of the entire Akiyoshidai Groundwater System.

Wildlife in the Caves:

Deep in the underground caves, there are many unique cave-dwelling animals. Some of them lost their eyesight or body pigmentation due to living in the darkness. Six bat species with a total population of 20,000 have been found in the cave, including the 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 every year. 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 arrayed like terraced fields, and the enormous limestone pillar of 15m in height and 4m in diameter.

[Greater Horseshoe Bat *Rhiolophus fer-rumequinum*] It is a cave-dwelling bat with a horseshoe-shaped nose-leaf 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 3600 of individuals inhabit the caves of Akiyoshidai.

Contact Information:

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