

Imuta-ike

Freshwater Lake, Low Moor

Geographical Coordinates: 31°49'N, 130°28'E / Altitude: 296m / Area: 60ha / Major Type of Wetland: Freshwater lake (crater lake), low moor / Designation: Natural Habitat Conservation Area under the Law for the Conservation of Endangered Species of Wild Fauna and Flora / Municipalities Involved: Satsumasendai City, Kagoshima Prefecture / Ramsar Designation: November 2005 / Ramsar Criteria: 2



Full view of Imuta-ike

General Overview:

Imuta-ike is a crater lake situated in the mountains in the upper reaches of the Sendai River, 25km northwest of Kagoshima City, the capital of Kagoshima Prefecture. It is a 60ha lake formed in the volcanic crater of Mt. Iimori. The water level of the lake is at an altitude of 296m. Imuta-ike is surrounded by mountains with altitudes ranging from 400 to 500m. Steep cliffs of the crater wall surround the lake. Imuta-ike has no river inflow but it drains into the Sendai River on the east side of the lake.

Imuta-ike is a small round lake with a circumference of 4km. Some peat strata have been formed over a long period of time in the northwestern part of the lake to form a low moor. Some of the peat layers have separated to form floating islands which are designated as a national natural monument as they are rarely seen in this relatively warm region.

Serene Shallow Lake:

Imuta-ike is a shallow lake with an average depth of 0.8m and a maximum depth of 2.7m. It has a quiet atmosphere with few human settlements around. Reed and Wild Rice grow in abundance in the wetland. It is a good habitat for a number of wildlife including Spot-billed Duck, Little Grebe, and fish species such as *Oryzias latipes* and *Zacco platypus*.

Dragonflies and the lake:

A typical creature of Imuta-ike is a lentic species of dragonfly. This lake has a suitable ecosystem for the spawning and emergence of dragonflies such as *Libellula angelina*, *Epophthalmia elegans elegans*, *Sympetrum kunckeli*, *Trithemis aurora* and *Rhyothemis fuliginosars*.

Approximately 200 species of dragonflies are found in Japan. There are 54 species of dragonflies observed around the Imuta-ike. In particular, *Libellula angelina* is the most endangered of all wetland dragonflies and Imuta-ike is one of its limited habitats.

Local people have organized conservation groups for *Libellula angelina*. In addition, a pavilion for ecological conservation "AKUAIMU" has been established on the lakeshore for raising public awareness. To conserve the habitat of this dragonfly, a biotope was created in the western part of the marshland. It is used as a field for environmental learning as well.

In order to protect the peat-forming plant community, which is also an important habitat for *Libellula angelina*, zoning has been set for fishing and boating on the lake. In relation to non-native fish species that are potential predators of *Libellula angelina*, a city ordinance prohibits the re-release of fish caught by fishing or other means, and collection boxes have been placed in the area.



Libellula angelina

[*Libellula angelina*] A small dragonfly with a body length around 4cm, this dragonfly is recognized by its amber wings with blackish-brown spots. It prefers wetland environments with abundant vegetation and was once widely found in Honshu, Shikoku, and Kyushu. Currently, breeding habitat is highly limited.

Contact Information:

Satsumasendai City Office
<http://www.city.satsumasendai.lg.jp/>

