# **Streams in Kume-jima**

# **Permanent and Seasonal Streams**

Geographical Coordinates: 26°22′N, 126°46′E / Altitude: 120-280m / Area: 255ha / Major type of wetland: Permanent and seasonal streams / Designation: Natural Habitat Conservation Area under the Law for the Conservation of Endangered Species of Wild Fauna and Flora / Municipalities involved: Kumejima Town, Okinawa Prefecture / Ramsar designation: October 2008 / Ramsar Criteria: 2



Middle reaches of the Shirase River

#### **General Overview:**

Kume-jima is an island located approximately 100km west of the main island of Okinawa. The island has an area of approximately 5,900ha with a shoreline stretching to approximately 48km. In the northern area of the island, the ridge of hills including Mt. 0 (230m) and Mt. Uegusuku (309m) runs from west to east in an arched formation. In the southeast, a gently sloping terrain extends with the Uraji River and the Shirase River running through it. Steep slopes face the sea in the north.

With a mean annual temperature of 22.4 degrees C and an annual precipitation of approximately 2,200mm, the hills in such subtropical climate are covered with dense forest dominated by *Castanopsis sieboldii* ssp. *lutchuensis* and Ryukyu Pine Tree. These hills are a good catchment area for the large volumes of clean fresh water that constantly springs out from the cracks of rocks.

### **Rich Biodiversity:**

The Ramsar site includes the ecosystem of numerous small streams that originate from the hills, and their surrounding wetland. The streams sometimes run under the ground and the clean water containing rich dissolved oxygen provide a humid condition favorable for many endangered species endemic to Kume-jima such as Kikuzato's Stream Snake (*Opisthotropis kikuzatoi*), Kumejima Firefly (*Luciola owadai*), and *Candidiopotamon kumejimense*. It is an ecosystem unique to Kume-jima, and valuable for scientific research as well.

The area is a management area for "Natural Habitat Conservation Area for Kikuzato's Stream Snake" under the "Law for

View of the designated area (right hand side) from Mt. Uegusuku



the Conservation of Endangered Species of Wild Fauna and Flora".

Two facilities, Kumejima Nature & Culture Center and Kumejima Firefly Museum, have been established for conservation management and public awareness.

[Kikuzato's Stream Snake (*Opisthotropis kikuzatoi*)] This snake is endemic to the streams in Kume-jima with a body length of 60cm and a dark brown body with yellow spots on the back. It has adapted to a life in water and has nostrils on the upper part of its head. The snake is innocuous and feeds on small animals such as freshwater crabs. The nature of this species is still unknown because very few of its members have been found and identified.

**[Kumejima Firefly** (*Luciola owadai*)] This firefly is a 1.5–1.8cm long and was described as endemic to Kume-jima in 1994. Its larvae live in streams and feed on some pleurocerid snails. Adults emerge from April to the beginning of May. These fireflies form groups and synchronously flash their lights.

**[Ryukyu Black-breasted Leaf Turtle** (*Geoemyda japonica*)] A species of tortoise endemic to Okinawa islands, with the shell of 13–15cm long. The edge of the



Kumejima Fireflies flashing in unison

Upper reach of Shirase River



shell is jagged like a saw. They live in wet environments in the mountainous forest. **[Other Rare Species]** Reptile: *Sinomicrurus japonicas takarai, Goniurosaurus kuroiwae yamashinae,* / Amphibian: Ryukyu Brown Frog (*Rana ulma*) / Birds: Amami Woodcocl (*Scolopax mira*) / Japanese Wood Pigeon (*Columba janthina*) / Fish: *Rhinogobus* sp. YB / Crustacea: *Geothelphusa kumejima* / Insects: *Trypoxylus dichotomus inchachina, Prosopocoilus dissimilis kumejimaensis* / Shells: *Satsuma mercatoris kumejimaensis, Satsuma perverse, Satsuma omoro.* 

## **Contact Information:**

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