

# 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 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 5900ha with a shoreline that stretches approximately 48km. In the northern area of the island, the ridge of hills including O-take (230m) and Uegusuku-dake (309m) runs from west to east in an arching line. In the southeast, a gently sloping terrain extends with the Uraji river and 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 2200mm, the hills in such sub-tropical 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 amount of clean fresh water that constantly springs out from the cracks of rocks.

### Rich Biodiversity:

The Ramsar site covers the ecosystem of numerous small streams that originate from the hills, and the wetland around them. The streams sometimes run under the ground and the clean water containing rich dissolved oxygen provide a humid condition favorable to many endangered species endemic to Kume-jima such as Kikuzato's Stream Snake, Kumejima Firefly, and Kumejima Minami Freshwater Crab. It is an ecosystem unique to Kume-jima, and valuable in terms of scientific research as well.

The area is a management area for "Natural Habitat Conservation Area for Kikuzato's Stream Snake" under the "Law for the Conservation of Endangered Species of Wild Fauna and Flora".

View of the designated area (right hand side) from Uegusukudake



There are two facilities, Kumejima Nature & Culture Center and Kumejima Firefly Museum, for conservation management and public awareness.

**[Kikuzato's Stream Snake *Opisthotropis kikuzatoi*]** This Snake is an endemic snake to the streams in Kume-jima island 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 ecology of this species is still unknown because the number of those that have been found and identified is too small.

**[Kumejima Firefly *Luciola owadae*]** The Kumejima Firefly is a 1.5-1.8cm long firefly found to be endemic to Kume-jima in 1993. It looks like the Japanese Firefly *Luciola cruciata*. The larvae live in streams and feed on some snail species such as *Semisulcospira libertina*. Adults emerge from April to the beginning of May. Members in a group synchronize flashing 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 shell is jagged like a saw. They live in wet environments in the mountain forest.



Kumejima Fireflies flashing in unison

Upper reach of Shirase River



Kumejima Minami Freshwater Crab

Kikuzato's Stream Snake

**[Other Rare Species]** Reptile: Yamashina's Ground Gecko *Goniurosaurus kuroiwae yamashinae*, *Kumejimahai Sinomicrurus japonicus takarai* / Amphibian: Ryukyu Brown Frog *Rana okinavana* / Birds: Japanese Wood Pigeon *Columba janthina* / Crustacea: Kumejima Minami Freshwater Crab *Candidiopotamon kumejimense*, Kumejima Great Freshwater Crab *Geothelphusa kumejima* / Insects: Kumejima Beetle *Allomyrina dichotoma inchachina*, Kumejima Prosopocoilus *Prosopocoilus dissimiliskumezimaensis*/Shells: Kumejima Snail *Satsuma mercatoria kumejimaensis*.

### Contact Information:

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