# Nagura amparu

## **Tidal Flat, Mangrove Forest**

Geographical Coordinates: 24°23′N, 124°08′E / Altitude: 0m / Area: 157ha / Major Type of Wetland: Tidal flats, mangrove forests / Designation: Special Protection Area of National Wildlife Protection Area, Special Zone of National Park / Municipalities Involved: Ishigaki City, Okinawa Prefecture / Ramsar Designation: November 2005



Mangroves spread out into the tidal flat

#### Introduction:

Ishigaki Island is found at the center of the Yaeyama Islands on the southwesternmost end of the 3000km-long Japanese Archipelago. The island, at long. 24°N and lat.124°E, is an additional 400km to the southwest of Okinawa Island. Ishigaki Island has a total area of 22,200ha and a population of 48,000. The average temperature is approximately 24°C throughout the year with minimal yearly flux, common among subtropical climates.

Nagura Amparu is a tidal flat with mangrove forests located on the west coast of Ishigaki Island, where the Nagura River flows into Nagura Bay. This estuarine tidal flat extends 2km north to south and 1.5km east to west as a richly diverse natural environment of a subtropical combination of tidal flat and mangrove forest, making this type of wetland unique and valuable in Japan.

The Nagura Amparu area was formerly a basin facing the sea, where an accumulation of sediment in the water resulted in the formation of a sandbar, ultimately creating a shallow lagoon.

#### Mangroves and Biodiversity:

Mangroves are found only in limited regions in Japan. In Nagura Amparu, mangrove species characterized by their stilt roots and breathing roots or pneumatophores, such as *Bruguiera gymnorhiza*, *Lumnitzera racemosa*, *Rhizophara mucronata*, and *Avicennia marina* are commonly found.



Top: The Barred Mudskipper, Bottom: Fiddler Crab

In addition to benthos such as the polychaete worm and the burrowing shrimp, a variety of species of small fish and crustaceans inhabit the area as well. In great abundance are shrimp and crab species including the many rare and endemic species found in the wetland. The creatures here are also a source of inspiration for locals; the crab species are humorously brought together and personified in a folk song.

### A Stopping Point for Migratory Birds:

By providing a rich feeding ground and safe environment, Nagura Amparu is an important stopping point for a variety of migratory bird species such as sandpipers, plovers, and ducks. The blackfaced spoonbill is also observed. This wetland is also home to the raptor, the crested serpent eagle, whose northernmost habitat is the Yaeyama Islands.



The view of the Nagura Amparu from the east



The top species of the ecosystem of Nagura Amparu: the Crested Serpent Eagle

[Crested Serpent Eagle Spilornis cheela perplexus] With a body length of approximately 55cm, this middle sized eagle is smaller than black kite, but similar to the common buzzard. It is widely found throughout the tropical and subtropical zones of India, Southeast Asia, Taiwan, and the southern Ryukyu Islands. In Japan, the eagle inhabits only Iriomote Island and Ishigaki Island. Although it feeds mainly on snakes, it prefers the more abundant crabs when at Nagura Amparu.

#### **Contact Information:**

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