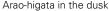
Arao-higata

Tidal Flat

Geographical Coordinates: 32°58'N, 130°25'E / Altitude: 0m / Area: 754ha / MajorType of Wetland: Tidal flat / Designation: Special Protection Area of National Wildlife Protection Area / Municipalities Involved: Arao City, Kumamoto Prefecture / Ramsar Designation: July 2012 / Ramsar Criteria: 1, 2, 6 / EAAFP Flyway Network Site







Saunders's Gull



A flock of sandpipers

# **General Overview:**

The tidal flat on the eastern coast of the middle part of Ariake Sea is one of the largest single tidal flats in Japan with a maximum width of 3.2km, a maximum length of 9.1km and an area of 1656ha. Arao-higata is a part of this tidal flat and as it has no major river inflow, the sediments and shells carried by the tide accumulate on the sea bottom forming sand banks near the low tide line at the same time. The tidal flats in Ariake Sea is a rich habitat with various forms of life such as lugworms(Polychaeta), shellfish, small crustaceans and a number of migratory birds. It has long been used as a ground for laver cultivation and clam fishing. In July every year, "A Day for Fishing Japanese Mud Shrimp" is held by Arao City with the participation of more than 900 people who enjoy the taste of the catch from the tidal flat.

### Rich Diversity of Life in Arao-higata:

Arao-higata is mostly sandy and not boggy like the mudflats in Saga Prefecture of the sea.

The sediments flowing from rivers are rich in organic matter. As the tide ebbs and flows, the sediments are roiled and mix with the seawater. The sea water rich in organic matter supports seaweeds and innumerable planktons that become the food source for the benthos of sandy habitat, such as lugworms, clams and small crustaceans. Furthermore there are diverse forms of life such as waterfowls feeding on those benthos and fish in shallow water. Arao-higata is called the 'treasure sea' by the local people and clam harvesting and laver cultivation have thrived since the old days.

### A Major Stopover Site for Migratory Birds:

Arao-higata is a stopover and wintering habitat for a number of shorebirds from autumn to spring. A number of shorebirds such as Kentish Plover, Grey-tailed Tattler, Black-bellied Plover, Red-necked Stint, Terek Sandpiper and Lesser Sand Plover stop over in autumn, and the birds such as Dunlin and Kentish Plover spend winter here while the birds found here in spring includes Bar-tailed Godwit, Black-bellied Plover and Grey-tailed Tattler. During the survey of "Monitoring site 1000, Survey on Shorebirds" conducted by the Ministry of the Environment in spring 2014, 4850 birds were counted to score the third highest population in the country.

In addition to this, Arao-higata is an important wintering habitat for a number of vulnerable migratory birds such as Black-faced Spoonbill, cited as "critically endangered" in the Red List of the Ministry of the Environment, along with Common Shelduck, cited as "endangered", and the Saunders's Gull cited as "vulnerable".

## **Conservation Efforts for the Tidal Flat:**

Although the laver aquaculture and clam fishing are still active today, the output is decreasing because of the outbreak of red tide caused by water quality degradation, the exhaustion of resources and other factors. In order to recover the fishing ground, the local fishing cooperative is conducting restoration work including tidal flat cultivation and sand scattering. The plowing for clam cultivation contributes to increase the resources in the tidal flat. In addition, the practice in clam cultivation to use seed shells originated only from Arao is another example of Arao's fishery that coexists with the tidal flat.

Meanwhile, the people of the coastal community of Arao City are engaged in activities to protect the nature of Ariake Sea. They created "The Art Museum at the Sea" on the coastal embankments in order to raise public awareness for the natural environment. They also organize regular beach cleanings and bird watching meetings in collaboration with the Kumamoto branch of the Wild Bird Society of Japan. In addition to this, the governments of the 4 prefectures around Ariake Sea conduct simultaneous beach cleaning every August.

### **Contact Information:**

Arao City Office http://www.city.arao.lg.jp/

