

# Shizugawa-wan

Geographical Coordinates: 38°40'N, 141°30'E / Altitude: 0m / Area: 5,793ha / Major Type of Wetland: B: Marine subtidal aquatic beds (Underwater vegetation) / Designation: Marine Park Area of National Park / Municipalities Involved: Minamisanriku Town, Miyagi Prefecture / Ramsar Designation: October 2018 / Ramsar Criteria: 1,2,3,4,6

## Seaweed Bed



View of Shizugawa-wan from the southeast

### General Overview:

Shizugawa-wan is located in the southern Sanriku Coast facing the North Pacific. The environment of the bay is affected by three well balanced sea currents, the nutrient rich Oyashio, a cold current, and Kuroshio and Tsugaru, warm currents, which bring warm water from the south. This is the reason for the bay's extensive seaweed bed of two major and valuable Kelp species, Makonbu *Saccharina japonica*, that grows in the cold sea, and Arame *Eisenia bicyclis*, that grows in the warm sea. The bay has several islets such as Are and Tsubaki, along with rocky reefs, sandy silt shore and tidal flats on the coast.

More than 100 Brent Geese *Branta bernicla nigricans*, a national natural treasure classified as Vulnerable in the Red List by the Ministry of the Environment, Japan, winter here every year. In order to spend winter here, they need foods such as eelgrass and rocky reefs for resting. Fish-eating raptors such as White-tailed Eagles *Haliaeetus albicilla* and Steller's Sea Eagles *Haliaeetus pelagicus* also visit here to winter.

There is a monitoring station for monitoring the representative seaweed beds in Japan (Monitoring Sites 1000 Project conducted by the Ministry of the Environment) near Tsubaki islet approximately 4km away from Shizugawa Port. The monitoring has been carried out continuously since 2008. Although the tsunami after the Great East Japan Earthquake in 2011 brought about serious damage, the seaweed bed is recovering now.

### Diverse Types of Seaweed Beds:

Seaweed bed is called seaweed forest or seagrass meadow, and there are 4 types of seaweed beds in the bay, three seaweed beds consist of Kombu *Saccharina japonica*, Ara-

me *Eisenia bicyclis* and Garamo *Sargassum sp.* respectively, and one sea grass bed of eelgrass. More than 200 species of sea grasses and seaweeds have been identified in the eelgrass bed and there are 4 species such as *Zostera marina*, *Zostera caespitosa*, *Zostera caulescens* and *Phyllospadix iwataensis* including several endangered species. It is hard to find such diverse seaweed beds in the world. In addition to the seaweed and sea grass species, the bay supports the marine biodiversity of more than 550 species as their feeding ground and habitat.

### Sustainable Aquaculture:

The bountiful Shizugawa-wan supports fishery, the main industry of Minamisanriku Town. Aquaculture of Oyster, Wakame and Silver Salmon in this bay has been supporting people's livelihood for a long time. The local community is aiming at sustainable aquaculture with proper management. The oysters produced here gained ASC certification, an eco-labeling for aquaculture products issued by the Aquaculture Stewardship Council.

### Centers of Nature Experience:

The site has Minamisanriku Marine Visitor Center of Sanriku Fukko (reconstruction) National Park. The visitor center releases nature information from the National Park and the Ramsar site in it. It also offers opportunities to enjoy nature, such as nature experience programs including kayaking.

There used to be a nature center for wise use of natural environment in the Tokura district, Minamisanriku Town, and the center organized several educational programs and capacity building activities before it was destroyed completely by the tsunami after the Great East Japan Earthquake. Currently, aiming at reestablishing the nature center,



Brent Geese



Aquaculture of oysters (Photo: WWF Japan)



Seaweed bed (Arame *Eisenia bicyclis*)

a preparatory office was set up in the town hall, to conduct activities such as environmental education activities and scientific researches including biota monitoring.

### Contact Information:

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