

Gamou Tidal Flat



Designation:
Gamou Special Zone of
Sendai-kaihin National Wildlife
Protection Zone

Location:
Sendai, Miyagi Prefecture

Year Initiated: 2002

**Gamou Tidal Flat Nature
Restoration Committee
(as of March 2009)**

The Committee conducts preservation and restoration of tidal flat habitats that are vital as stopover sites for plovers and sand pipers and abundance of benthic organisms.

Date Established: 19 Jun. 2005

Members: 24

Date Issued the Overall Plan: 16 Sept. 2006

Date Issued the Implementation Plan:

● 29 Mar. 2008 (Gamou Tidal Flat Project, sponsored by Miyagi Prefecture)



Brent goose

Goal
Preserve healthy wetland habitats for migratory birds of upper-trophic level species and create opportunities for conservation, education and sharing of communication and information among various groups by properly allocating the area for resource use



Gamou Tidal Flat has been artificially created through construction of the Sendai Port and river engineering work. It is an estuary where freshwater mixes with seawater, providing internationally important staging, breeding and wintering habitats for migratory birds. It is also vital as a most southern wintering site for the brent goose (*Branta bernicla*).

Lately, however, the Tidal Flat is becoming shallower and more sandy due to sand transport from the ocean. Tidal flat area has also been reduced because of retarded water flow. Various efforts are underway to restore healthy habitats for the biological community with migratory birds as key species and to avoid further human-related alterations.



The original Gamou Tidal Flat



Restoration area. The tidal flat area was reduced, compared to that in 1975.

Approaches

- ▶ Preserve and restore tidal flat habitat supporting diverse creatures →②③
- ▶ Restore hydrographic conditions maintaining the wetland habitat →②③
- ▶ Preserve and restore beach habitat →①
- ▶ Promote environmental conservation and education and create opportunities for communication among stakeholders →①

Rules for proper use of the tidal flat and beach are being developed while taking actions to preserve and restore tidal flat habitat and to mitigate sand transport into the Tidal Flat.

① Making rules for recreational use

Recreational use plans and guidelines are being developed according to the type of activities, such as marine sports (e.g., surfing) and harvesting (e.g., fishing).



② Sand transport control and channel dredging

Storm-wave overtopping has carried sand into the Tidal Flat, altering the muddy substrate to sandy. The lagoon area is also becoming shallower. It is now difficult to ensure effective water circulation. To preserve and rehabilitate tidal flat and to mitigate water flow regime, sand transport control and channel dredging is being planned.



③ Improvement of the existing flow control levee

The existing flow control weir at the inlet of the river flow has been degraded, making hydraulic control difficult. Rehabilitation of the weir is being planned to enable the water circulation to be adjusted.

