



Designation:
Proposed for National Wildlife Protection Zone

Location:
Urayasu; Ichikawa; Funabashi; and Narashino, Chiba Prefecture

Year Initiated: 2002

Sanbanze Restoration Council

The Council pursues restoration and preservation of the natural environment and the sea to enjoy by the local residents, in order to protect the important remnant wildlife in the Tokyo Bay.



Dunlin (*Calidris alpina*)

Sanbanze

Goal

Restoration of Biodiversity; Restoration of the Continuity of Sea and Land; Restoration of Environmental Sustainability and Recoverability; Restoration of Fishery Productivity; and Establishment of a Close Relationship between Man and Nature

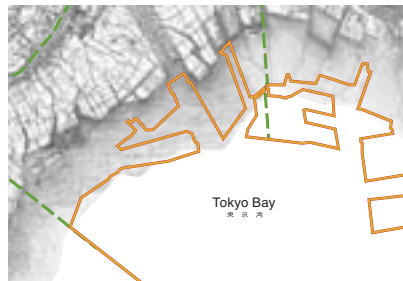


Sanbanze is a 1,800ha area of combined tidal flat and shallow sea area, which survives at the mouth of Edo-gawa Canal in the inner shore of the Tokyo Bay. The modern shape, enclosed by filled grounds on three sides, was formed by land reclamation of the inner Tokyo Bay between the 1960s and 1970s. Sanbanze harbors numerous phyllocid snails, clams (e.g., the Manila clam, *Ruditapes hilippinarum*), and fish (e.g., gobies and flatfish) and is a stopover site by the colonies of the greater scaup (*Aythya marila*

mariloides), plovers and sand pipers.

The tidal flat and shallow water habitat, however, have been progressively deteriorated by landfill, ground subsidence, and the migration of 'blue tide' (oxygen-depleted water upwelling) due to eutrophication by wastewater inputs. In order to protect the valuable, remnant wildlife of Sanbanze in the Tokyo Bay, efforts for protection and restoration of healthy habitat conditions and the sea for the local residents to enjoy are in progress.

Change in the coastline
The coastline in 1945. The red solid and green dashed lines denote the coastline in 1998 and the city boundary, respectively.



Approaches

- ▶ Re-establish estuarine conditions in the Gyotoku marsh and expand tidal flat area →①
- ▶ Enhance the linkage between Sanbanze and Gyotoku Marsh →①②

To restore the Sanbanze ecosystem by re-establishing biological diversity and the connectivity between sea and land, various studies for enhancing the creation of blackish water habitat with a wide range of salinity, expansion of tidal flat habitat and rehabilitation of a tidal marsh are being conducted. To effectively use the study results, database construction and documentation of monitoring protocols are underway.

① Restoring estuarine conditions and expanding tidal flat in Gyotoku Marsh

An adjacent but nearly disconnected marsh, the Gyotoku Marsh, will be rehabilitated as a tidal blackish marsh that is linked to the Sanbanze shallow water, by stimulating tidal flushing, filling deep areas, and enhancing freshwater inflow. Ongoing efforts include studies on improvement of an existing flow control gate and on effects of freshwater flow enhancement on the marsh water quality.

Schematic diagram of the restored Sanbanze in the future



② Conducting environmental monitoring at Sanbanze

To evaluate medium- to long-term variations in the biological community and its environment of Sanbanze, periodic surveys are being conducted to collect various data, such as the basin morphology, water quality, substrate, benthos, fish, algae, attached organisms, and avian species.

Related Web Sites

Sanbanze Restoration Plan: http://www.pref.chiba.lg.jp/syozoku/b_soukei/sanbanze/index-e.html