

# Status of Wetlands in Japan

productive because of their shallow water and complex ecosystems with a mixture of seawater and freshwater. They also play an important role for people as nurseries of marine resources and as coastal fishing grounds.

## Seagrass/Seaweed Beds:

Seagrass/Seaweed beds refer to coastal water bottoms with vast communities of seagrass such as Eelgrass and seaweed such as Kelp and Wakame. They have functions such as producing oxygen, purifying water and stabilizing the sea-bottom environment. In addition, they are important for coastal species including fish and sea turtles as their food sources, spawning sites, nursery grounds and shelter. People in Japan also have benefited from using the Seagrass/Seaweed beds as their fishing grounds for a long period of time.

According to the Survey on Marine Organisms Environment (Seagrass/Seaweed Bed) of 1994, Japan has a total 200,000ha of Seagrass/Seaweed beds (counting those exceeding 1ha in area) within the coastal waters less than 20m deep. Compared to the survey of 1978, 6,400ha of Seagrass/Seaweed beds have been lost by environmental degradation such as land reclamation and rocky-shore denudation. As these trends are still continuing today, their conservation is a pressing issue. In addition, there are many reports of damages by the tsunami caused by the Great East Japan Earthquake in 2011 in the Eelgrass bed growing at the innermost areas of bays. However, according to the report of the Ecosystems Monitoring Survey of the Pacific Coastal Areas of the Tohoku Region, some communities are recovering in some areas such as Matsushima Bay.

## Tidal flats:

According to the Seashore Survey (1998), 49,380ha of tidal flats that exceed 100m in width and 1ha in area during low tide were identified. When tidal flats are exposed and submerged repeatedly, nutrient rich sediments both from the river and sea are deposited there, to build up a rich community of microorganisms and benthos. The water purification function of these organisms attracts people's attention these days. Tidal flats are also indispensable for shorebirds as their feeding and resting sites.

Due to scarcities of flatlands, tidal flats tend to become the targets of various development projects in Japan, and consequently, a total of approx. 6,000ha tidal flats disappeared in the twenty years after 1978. Some of the existing tidal flats are under threat of development even now.

## Mangrove Forests:

According to the Seashore Survey (1998), out of 2,670ha of mangrove forests in Japan, over 95% are found in Okinawa Prefecture.

Although most are small in size, there are a few which exceed 100ha. Out of over 100 species of mangrove plants in the world, 7 species belonging to 4 families have been identified in Japan.

## Coral Reefs:

The total area of reef-building corals in Japan is approximately 35,350ha, most of which is found in the Nansei Islands further south of the Tokara Archipelago of Kagoshima Prefecture. The species diversity of reef-building corals found there is among the most outstanding in the world.

## Ramsar Sites in Japan

Japan became a contracting party to the Ramsar Convention in 1980 and designated Kushiro Shitsugen as the first Ramsar site in Japan. The Fifth Meeting of the Conference of the Contracting Parties (COP5) to the Ramsar Convention was held in Kushiro City in Japan in 1993. People in Japan and the rest of Asia became interested in wetlands through this event, which widely raised awareness of the objectives of the Ramsar Convention.

Japan has been promoting the designation of additional wetlands in accordance with the occasion of each COP. Two sites, Shizugawan in Miyagi Prefecture and Kasai Marine Park in Tokyo, were designated as new Ramsar sites at COP 13 held in the United Arab Emirates (UAE) in October 2018, counting 52 sites in Japan in total. Wetlands are classified into 42 types by the Annex I to the Resolution VIII.13 of the Ramsar Convention. The wetlands in Japan are designated as Ramsar sites mainly because they are important habitats for waterfowl, however, various types of wetlands such as marshlands, lakes, ponds, lagoons, rice paddies, seagrass/seaweed beds, tidal flats, mangrove forests, coral reefs and groundwater systems are also being designated, reflecting the diversity of Japan's wetland ecosystems.

The Ramsar Convention adopted the criteria and guidance for identifying wetlands of international importance of Annex II to the Resolution VIII.13 and so forth (see the reference). When selecting candidate wetlands for Ramsar sites, Japan sees the following as prerequisites:

1. Meet the criteria for identifying wetlands of international importance set by the Ramsar Convention.
2. Ensure long term conservation of the site through national legislation (Natural Parks Law, Wildlife Protection and Hunting Management Law etc.).
3. Gain the consent and support of local communities.

## The Conservation and Wise Use of Wetlands

Defining wetlands in the broadest of terms, the Ramsar Convention strives not only for their conservation but also for their wise use. The 'wise use' of wetlands is defined as "sustainable utilization for the benefit of mankind in a way compatible with the maintenance of the natural properties of the ecosystem."

In Japan, where people have been fostering a culture to coexist with nature instead of controlling it, there are a number of examples of wise use practiced by people for a long period of time. Rice cultivation in paddies is a form of wetland maintenance and management. Harvesting reed and lotus for domestic use has a function to prevent eutrophication in lakes and marshes, and local rules for hunting and fishing are other examples of wise use. It often is important for the promotion of wise use in each region to review these local cultures and traditional practices of wetlands.

## Policies for Wetland Conservation:

Japan's national policy on wetlands is described in the National Biodiversity Strategy of Japan 2012-2020. In order to conserve the ecological character of wetlands while building consensus of the society, it directs us to promote conservation and wise use of wetland in a big picture encompassing the river basin and coastal areas, using various measures such as grasping the ecological changes and conservation status through monitoring, expanding protected areas, implementing nature restoration projects and building networks between wetlands.

## Laws for Natural Environment Conservation:

Legislations for nature conservation and wildlife protection in Japan include the Basic Environment Law, Basic Act on Biodiversity, Nature Conservation Law, Natural Parks Law, Law for the Protection of Cultural Properties, Wildlife Protection and Hunting Management Law, Law for the Conservation of Endangered Species of Wild Fauna and Flora, Law for the Promotion of Nature Restoration, and Invasive Alien Species Act. Some of the laws regulate the development activities and resource exploitation focusing on specific species and/or specific areas, and some of them promote restoration of lost natural environments.

Many wetlands and species in wetlands are covered under these laws.