

Status of Wetlands in Japan

as Ramsar sites such as Sarobetsu-kenya, Uryunuma-shitsugen, Kiritappu-shitugen, Bekambeushi-shitsugen, Oze, Oku-Nikko-shitsugen, Watarase-yusuichi, Yoshigadaira Wetlands, Tokai Hilly Land Spring-fed Mires and Kuju Bogatsuru and Tedewara-shitsugen.

Rivers:

Japan has 109 principal river systems encompassing about 14,000 rivers and streams. Because Japan has many mountains, most rivers are short in length, and travel down steep inclines to the ocean. Heavy rainfalls in the upper reaches result in repeated sudden floods. Flood control is the greatest challenge in river basin management schemes.

Of the 113 major rivers in Japan, very few remain in their natural state, unmarked by dams, dikes, and sluices. Natural riverbanks have largely undergone artificial modification, resulting in the habitat loss for aquatic species every year. The Bekambeushi River in a Ramsar site in Hokkaido is one of the exceptional rivers retaining all of its natural riverbanks.

Freshwater Lakes:

Various types of lakes are scattered throughout the country. Some are in mountainous areas, while others lie in flatlands, and still others exist as lagoons in recessed coastlines.

Biwa-ko, a lake in Shiga Prefecture, is Japan's largest lake with an area of approximately 67,000ha. Other freshwater lakes designated as Ramsar sites include Kutcharo-ko, Akan-ko, Miyajima-numa, Utonai-ko, Onuma, Izu-numa and Uchi-numa, Kabukuri-numa, Sakata, Katano-kamoike, and Imuta-ike. They provide important habitats for ducks, geese, swans, and other waterfowl, as well as freshwater fish, plants, and aquatic insects such as dragonflies.

In addition to freshwater lakes, irrigation pools and reservoirs for rice paddies in Japan have played an important role as habitats for wildlife including migratory waterbirds.

Rice Paddies:

Rice paddies cover 2.5 million ha out of Japan's total land area of the 38 million ha. From ancient days, the Japanese have earned their livelihoods by rice production. Rice paddies and their interconnected channels and reservoirs, as well

as the managed broad-leaved deciduous forests in the surrounding hills form the unique, secondary natural environments found everywhere in Japan. This sort of secondary natural environment is a rich repository of biodiversity and has been maintained by moderate human disturbances such as the undergrowth clearing and pond dredging that have been conducted in people's daily lives. However, there is a problem that these balance are beginning to be lost because of the changing lifestyle.

Rice paddies are the grounds for food production as well as the important stopover sites and feeding grounds for migratory birds such as shorebirds and other waterfowl. In addition, rice paddies



provide habitats for innumerable aquatic species such as fish and insects. Rice paddies are included as some of the Ramsar sites in Japan, such as Kabukuri-numa and the surrounding rice paddies, Katano-kamoike, and the Lower Maruyama River and the surrounding rice paddies. There are numbers of Ramsar sites such as Miyajima-numa, Izu-numa and Uchi-numa and Sakata, which consist of a complex wetland ecosystem with the rice paddies around them.

In 2008, Japan and Korea jointly proposed at COP10 a draft resolution on enhancing biodiversity in rice paddies as wetland systems, which was adopted unanimously as the Resolution X.31. (See Appendix 1)

Groundwater Systems:

The Ramsar Convention now recognizes subterranean karst topography formed by limestone and underground hydrological systems as a wetland type as well. Japan's largest karst topography, the Akiyoshidai Groundwater System, with three subterranean caves, is designated as a Ramsar site.

Coastlines:

Japan consists of over 6000 islands and the total length of the coast line is 32,800km, of which 53.1% is natural and 33.0% artificial. Approximately 1300km of natural coastline has disappeared due to artificial modification in the 20 years following 1978. In the main islands of Hokkaido, Honshu, Shikoku and Kyushu, natural coast line covers only 42.3%.

The Ramsar sites along the coastline includes Miyajima, a well conserved natural coast and forest in the back, and Yakushima Nagata-hama, a natural sand beach which is the largest nesting habitat for the Loggerhead Sea Turtle in the Northern Pacific region.

Brackish Lakes:

There are numbers of coastal lagoons in Japan and most of them are brackish lakes linked to the sea. Often being the final depository of organic trophic materials from rivers, these lakes are shallow, with a complex ecosystem combining freshwater and saline environments. These combined characteristics create a highly productive ecosystem that abounds with marine resources that support fishing industries. The

Ramsar sites in Japan include those brackish lakes such as Tofutsu-ko, Furen-ko, Akkeshi-ko, Hinuma, Mikata-goko, Nakaumi, and Shinji-ko.

Seagrass/Seaweed Beds:

Seagrass/Seaweed beds refer to coastal waters where vast communities of seagrass such as Eelgrass and seaweed such as Kelp thrive. These areas provide oxygen for marine organisms, purify water and stabilize the sea-bottom environment. In addition, they are important for providing not only food sources, but also places for nesting, growth, and hiding for countless species including fish and sea turtles. Seagrass/Seaweed beds have been excellent fishing grounds for Japanese people for a long period of time.

According to the Survey on Marine Organisms Environment (Seagrass/Seaweed) in 1994, Japan has 200,000ha of Seagrass/Seaweed beds (counting those exceeding 1ha in area) within the waters shallower than 20m. Compared to the 1978 survey, 6400 ha of Seagrass/Seaweed beds was lost by land reclamation