contents

The Japanese Archipelago and Nature

The Japanese Archipelago is an island chain spanning 3000km from north to south along the Japan Sea in the east of the Eurasian continent. It consists of four major islands of Hokkaido, Honshu, Shikoku, and Kyushu, with 6000 islands surrounding them.

The geography of Japan is diverse as seen in its high altitude mountain ranges exceeding 3000m in height, coastlines of over 30,000km, and hundreds of rivers and streams flow down the generally steep, eroded slopes.

Spanning subarctic to subtropical zones, climatic conditions are varied as well, influenced by seasonal monsoon winds, with distinct weather patterns for each season and average precipitation exceeding 1000mm per annum.

Forests cover over 25 million ha, or 67% of the total area of Japan, with most found in mountainous areas. The slopes of the mountains are generally steep and dissected by many ravines and gorges. Most plains and basins are small in size and scattered among hills or along the coasts. Many of them were shaped by the river sediments.

Land use is quite complex in Japan, due mainly to its topography. Most mountains and hilly areas are covered by forests with some parts converted to pastures and orchards. Flatlands including plateaus, terraces and plains are generally used for agricultural and residential purposes. Rice paddies dominate the plains except in sprawling urban areas.

In such a country where there is a rich growth of all forms of life, the Japanese have nurtured a culture to live in accordance with the changing seasons while they were forced to live with natural disasters such as earthquakes and volcanic eruptions. However, instead of confronting nature, the Japanese acclimated to nature and cultivated wide-ranging knowledge, skill, arts, sensitivity, and a sense of beauty.

Japan's rich biodiversity has been shaped by the climate, intricate land use, diverse natural environment and traditional view of nature in each region where people live harmoniously with nature. Approximately 69,000 species have been identified in Japan including 160 species of mammals, 700 species of birds, 30,000 species of insects and 7000 species of vascular plants as well as many endemic species.

The population of Japan is 127.5 million, most of which is concentrated in the very small flatland areas. The average population density is 343 persons per km^2. Human intervention and the changing lifestyle induced by rapid urbanization during the high economic growth have increasingly exerted pressures on the natural landscape, as well as biosphere in Japan. As a result, many flora and fauna are faced with extinction.

Status of Wetlands in Japan

Because of the large amount of precipitation and the surrounding oceans, Japan is a country blessed with water. Consequently, within its small land area there are numerous marshlands, rivers, ponds and lakes, beaches, tidal flats, coral reefs, mangrove forests, seagrass/seaweed beds, rice paddies, reservoirs, springs, and underground water systems, which represent the myriad of wetland types supporting Japan's rich biodiversity.

Marshlands:

In the field of soil science, marshlands are known as peatlands. These can be classified into high moors which are rich in plant species such as sphagnum sustained only by nutrient-poor rainfall, low moors where reeds and sedge thrive enriched with trophic salts from rivers, and the intermediate moors characterized by colonies of plants such as *Moliniopsis japonica*.

As low moors tend to be directly impacted by human activity, those at lower altitudes in southern Honshu have long been converted into rice paddies and residential areas.

While they are found as far south as Yakushima Island, intermediate moors are generally distributed in cool temperate zones throughout Japan.

High moors are found extensively in the Chubu region of central Honshu and Hokkaido in the north, and provide important habitats for relict species of the Ice Age.

The largest existent marshland in Japan is Kushiro-shitsugen, a Ramsar site in Hokkaido, with an area of 18,000ha. There are many other marshlands designated