

Yoshigadaira Wetlands

Geographical Coordinates: 36°39'N, 138°33'E / Altitude: 1,200-2,160m / Area: 887ha / Major Type of Wetland: Intermediate moor, crater lake, pond and swamp, river / Designation: Special Zone of National Park / Municipalities Involved: Nakanojo Town and Kusatsu Town, Gunma Prefecture / Ramsar Designation: May 2015 / Ramsar Criteria: 1, 4



Overview of Yoshigadaira moor

Intermediate Moor, Crater Lake, Pond and Swamp, River



Jungermannia volcanicola communities



Spawning of Forest Green Tree Frog

General Overview:

Yoshigadaira Wetlands in Gunma Prefecture in central Honshu (island) of Japan is a cluster of wetlands. It includes intermediate moors, crater lakes, ponds, swamps and rivers, laid out on a terrace like slope from the top of Mt. Kusatsu-Shirane (2,160m) down to an area approximately 1,200m high on the northeastern side. Several marshes, ponds and swamps have developed on low-permeable soil layers or depressions formed by volcanic activities of Mt. Kusatsu-Shirane, and the highly acidic volcanic water and gas have created a unique environment. It is a wetland site with a beautiful landscape in Joshin'etsukogen National Park that has two-thousander mountains.

Intermediate Moors in Yoshigadaira Moor and Odaira Moor:

The Yoshigadaira moor (1,832m) and Odaira moor (1,600m) are the representative intermediate moors in the temperate coniferous forest biogeographic region, with a unique vegetation; it includes Cranberry (*Vaccinium oxycoccos*), Mud sedge (*Carex limosa*), and Sasa (bamboo grass) that grow well with the acid water, geothermal heat, hot water and abundant underground water flow. The pond clusters and the community of Hare's tail cotton grass (*Eriophorum vaginatum*) in Yoshigadaira moor as well as the Asian skunk cabbage (*Lysichiton camtschatcense*) in Odaira moor highlight the wetland site. Hidden in the forest, skirting under the wetlands, there are natural ponds named Heibei-

ike, O-ike and Mizu-ike, dominated by the emergent plants such as *Potamogeton fryeri* and *Isoetes asiatica*.

Yugama and Anajigoku:

Yugama (2,050m) is a crater lake of Mt. Kusatsu-Shirane, with highly acidic (pH1.-1.2) emerald green water. Anajigoku (1,300m) is the headstream area of the Motoyama River which has highly acidic (pH2.6-2.8) water containing abundant iron and sulfur. Anajigoku has a large community of representative species of acidophilic moss, *Jungermannia volcanicola*, which is called Chatsubomigoke in Japanese. The moss covers the area like a green carpet and people love this area, commonly known as Chatsubomigoke Park.

Rich Repository of Endangered Species:

The Yoshigadaira Wetlands is a home to 442 species of plants, 20 species of animals, 62 species of birds, 14 species of dragonflies or damselflies, and several endangered species such as Osprey, Japanese black salamander and a species of algae (*Batrachospermum turfosum*). Forest Green Tree Frog, an endangered species in Japan, usually spawn on tree branches hanging over the water surface; however, they spawn on the ground in areas with grass such as the lakeshore since there are no predatory fish in the highly acidic water. Those frogs are considered a unique example of local adaptive evolution induced by volcanic geothermal heat, hot underground water flow and the history of the formation of various local condi-

tions. This area is the frog species' highest (2,150m) breeding ground in Japan.

A Landscape View from an Overlooking Mountainous National Road:

The panoramic view of Yoshigadaira Wetlands can be enjoyed from the highest point (2,172m) of Route 292. From the highest point, people can see Yoshigadaira Wetlands spread out below, providing a beautiful contrast to the ragged terrain of Mt. Kusatsu-Shirane. Since the access to the wetland site is about an hour's walk downhill from Shibu Pass, located on the border of Gunma and Nagano Prefectures, many people visit the area to enjoy sightseeing and nature. Well-maintained mountain trails connect Yoshigadaira and Chatsubomigoke Park by way of Ohdaira moor, Heibei-ike pond, O-ike pond and Mizu-ike pond.

Contact Information:

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