

## Akan-ko

## Freshwater Lake

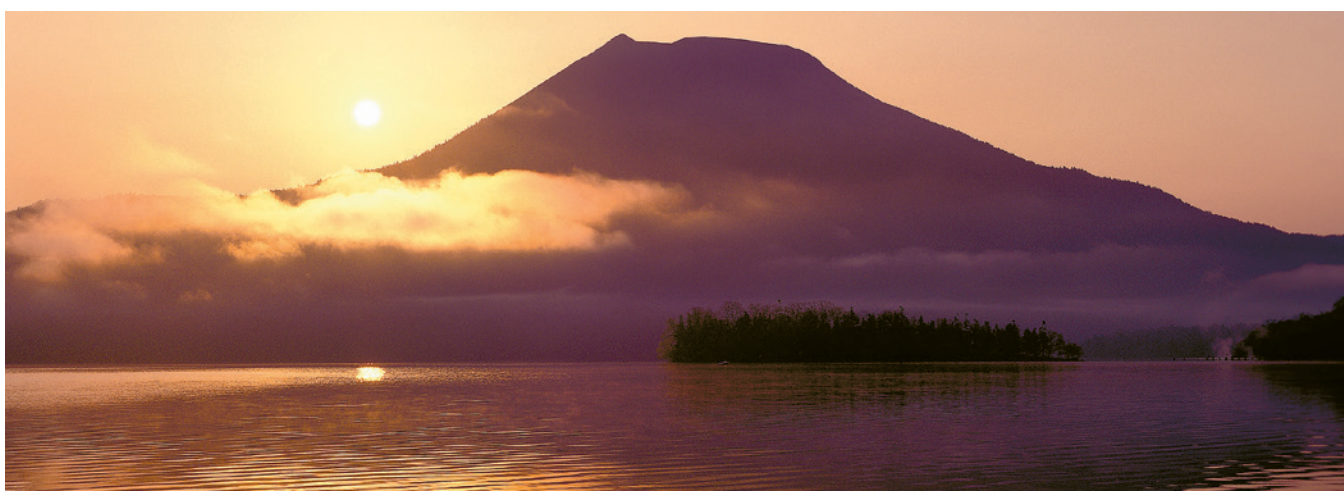
Geographical Coordinates: 43°27'N, 144°06'E / Altitude: 420m / Area: 1,318ha / Major Type of Wetland: Freshwater lake (caldera lake) / Designation: Special Protection Zone and Special Zone of National Park / Municipalities Involved: Kushiro City, Hokkaido Prefecture / Ramsar Designation: November 2005 / Ramsar Criteria: 1



Marimo



Lake Akan-ko from the south



Lake Akan-ko and Mt. Oakandake at sunrise

### General Overview:

Akan-ko is a part of Akan-Mashu National Park, situated in the eastern part of Hokkaido, north of Kushiro-shitsugen and south of Tofutsu-ko and Lake Abashiri.

The caldera lake was formed between 200,000 and 150,000 years ago by the eruptive activities of the Akan Volcano. Lake Akan is one of the lakes that was diminished and divided by activities of volcanoes like Mt. Meakan (1,499m) and Mt. Oakan (1,370m). It is a freshwater lake with an elevation at 420m, an area of 1,318ha, and an average depth of 18.7m.

The growing clusters of Marimo (*Cladophora aegagropila*) in the northern part of the lake are recognized as a National Natural Monument. For this reason, the lake is restricted to public access to conserve the world's only large spherical marimo.

The lake has four islands: Oshima, Kojima, Chuurui, and Yaitaimosiri. The marimo can be seen at the Marimo Exhibition Center on Chuurui Island, which can be accessed by sightseeing boat or motorboat. The mountains around the lake are covered by mixed forests of conifers such as Ezo Spruce and Sakhalin Fir, and deciduous

trees such as *Quercus crispula* var. *crispula*, and *Cercidiphyllum japonicum*. Having adapted to the severe environment of high mountains, *Pinus pumila*, and *Empetrum nigrum* var. *japonicum* can be found near the summit.

### The Protected Catchment Area:

The lake has a catchment area of 3,900 ha. Since the early 20th century, the region had been under private ownership, and forest management was practiced. In 1983, a foundation for environmental conservation was established to safeguard and manage the entire watershed. The Akan-ko and its surrounding watershed have been native to 24 mammal species and 65 avian species, including large indigenous mammals of Hokkaido, such as Brown Bear and Yezo Sika Deer; and endangered birds such as Black Woodpecker.

### Rare Aquatic Species:

Akan-ko is a habitat for several species of freshwater algae such as *Nitella flexilis*, *Chara globularis*, and the famous marimo. This lake is also an important habitat for fish such as Kokanee and Japanese Huchen, the largest freshwater fish in Japan.

### [Marimo (*Cladophora aegagropila*)]

A form of a green alga with a branching, thread-like shape. Depending on the environmental conditions, it is known to form spherical aggregates. It transforms into a gorgeous ball with a velvety surface in Akan-ko, which is unique in the world. When the diameter exceeds 10 cm, the interior becomes hollow, and typhoons and other disturbances can cause it to shatter and disintegrate. However, it returns to its spherical form after a long period.

### Contact Information:

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