

The Mysteries of Lake Onami-ike

The Mystery of Kirishima's Crater Lakes

Lake Onami-ike has a secret that it shares with many other crater lakes in the Kirishima Mountain Range. Even though there are no rivers or streams supplying the lake with water, its water level remains almost unchanged year-round. What could possibly be the reason behind this curious phenomenon?

There's more to Lake Onami-ike than meets the eye. The lake's water source is subterranean. The bottom of the crater sits below the water table, which is what fills the crater with water, reflecting the abundance of water in Kirishima.

Lake Onami-ike's Stunning Autumnal Foliage Explained

In autumn, the vegetation around Lake Onami-ike turns bright shades of red and yellow, even though this is not the case for nearby mountains such as Mt. Shinmoedake and the Ohachi Crater. This difference is caused by differences in how the different areas have developed over time.

In the vicinity of volcanoes that have recently experienced volcanic activity, like Mt. Shinmoedake and the Ohachi Crater, only grasses and sparse woodlands grow. Where more time has passed since the last eruption, like Lake Onami-ike, ecological succession has had time to progress, leading to the development of an ecosystem in which a more varied plant population exists in relative stability. The difference in variety causes the difference in autumn foliage.

Among the momi fir, southern Japanese hemlock, and various evergreens that grow around Lake Onami-ike are Japanese beech, oak, and other broadleaf deciduous trees. These trees, whose leaves change color in autumn, were widely distributed in southern Kyushu during the last ice age, which reached its peak approximately 20,000 years ago. As the climate warmed, however, they disappeared everywhere but in the high-elevation areas of the Kirishima Mountain Range.

The comparatively recent volcanic activity of volcanoes in other areas has destroyed the ecological communities once home to deciduous forests descended from the ancient broadleaves. Since Lake

Onami-ike last erupted approximately 45,000 years ago, its color-changing flora has been able to fully grow and stabilize.

The analysis of vegetation surrounding a volcano tells us a great deal about its origins and history. Look carefully at the grasses, shrubs, and trees growing in the Kirishima mountains as you explore, and experience the vibrant history of the mountain range.