A Living Manganese Ore Deposit

The environment at Onneto Yunotaki Falls is a microcosm of the events that took place on Earth nearly three billion years ago. The delicate ecosystem of the falls shows us how natural metal resources were formed and how the Earth's oxygen-rich atmosphere was created.

An unlikely set of circumstances

The formation of the Yunotaki Lava Flow from the eruption of Pon-machineshiri, along with the combination of hot-spring water, manganese ions, cyanobacteria, and manganese-oxidizing bacteria at this site, is an unusual confluence of factors. Onneto Yunotaki Falls thus offers an extremely rare opportunity to witness the natural production of manganese oxide on land.

A delicate environment

The Onneto Yunotaki Falls Trail, which connects the parking lot to the falls, runs atop a lava field created by an eruption of Mt. Akanfuji about 2,000 years ago. For the last 200 meters, the trail climbs a steep slope along the side of Mt. Akanfuji's lava flow. Miraculously, the Yunotaki Lava Flow was not covered by the outpouring of lava from the Mt. Akanfuji eruption.

A Natural Monument of Japan

Because Onneto Yunotaki Falls represents a rare natural phenomenon, a kind of "laboratory in nature," it is crucial to preserve the falls for future generations. Onneto Yunotaki Falls was designated a Natural Monument of Japan in 2000, granting it special protection by the Japanese government.