

Biologically Diverse

The diverse landforms of Tokachi Shikaoi Geopark support a wide range of habitats and species. The vast Tokachi Plain with its tillable, ash-rich soil has long allowed agriculture to flourish. The Shikaribetsu mountains north of Shikaoi have rich ecosystems and micro-ecosystems with diverse moss and lichen species as well as uniquely evolved and relict animal species.

A relic of the ice age

The windhole-dotted mountain slopes around Lake Shikaribetsu are home to a subspecies of the northern pika, a cold-climate mammal typically found only in northern regions of the Eurasian continent. Pikas are closely related to rabbits and hares. The Ezo pika, or Ezo *nakiusagi* is a subspecies endemic to Hokkaido and is about the size of a human fist, with a weight of around 120 grams. The animal is a vestige of the ice age, evolved from the northern pika, which likely migrated to Hokkaido via a land bridge connecting Hokkaido and Sakhalin to the continent. The windholes in the mountains of Shikaribetsu sustain a sufficiently cold environment and support the growth of alpine vegetation, such as Labrador tea, which is an important food source for the Ezo pika.

Evolved to adapt

The Miyabe char of Lake Shikaribetsu is a fish not found anywhere else in the world. This subspecies of *Salvelinus malma*, known as the Dolly Varden trout, has evolved in response to changes in its environment brought about by volcanic activity. The formation of Shikaribetsu's lava domes tens of thousands of years ago dammed the river running through the area, creating Lake Shikaribetsu and isolating the char. The fish had to adapt to a harsh new environment at a high elevation and with very limited food sources. Plankton became the species' primary source of nutrition, and in order to effectively process it, the fish evolved additional gill rakers—the Miyabe char has 26, while the Dolly Varden trout has 21 or 22.

Diverse moss species

Moss carpets the forests around Lake Shikaribetsu and grows on the windhole-dotted rocky slopes. Moss helps to soak up rainfall, maintain moisture in the soil, and keep the surrounding environment humid, enabling other plants to thrive. It also insulates windholes, which slows the thawing process of ice in spring and summer. More than 1,600 of the world's 10,000-plus moss species have been identified in Japan, and many

grow in Tokachi Shikaoi Geopark. Distinctive species in the park include apple moss, ostrich-plume feather moss, and goblin's gold, as well as several sphagnum varieties. The Lake Shikaribetsu area is designated a precious moss forest by the Bryological Society of Japan.