## The Effects of a Cold Climate

The cold climate and the freezing and thawing of water and ice are integral in shaping the landscape of Tokachi Shikaoi Geopark. The cold climate preserves permafrost, which is present at relatively low altitudes in the park. The permafrost is some of the southernmost in the Northern Hemisphere. Permafrost, landforms including talus slopes, and periglacial phenomena such as windholes are examples of the effects of a cold climate and the influence climate can have on an area's topography and biodiversity.

## How cold is "cold"?

Winters are long in Shikaoi. The low temperature for the downtown area does not exceed 0 degrees Celsius for around 157 days of the year\*, and the high remains subzero for approximately 73 days\*. In January, the average temperature is -6.7 degrees in the town and -12.2 degrees around Lake Shikaribetsu. During the coldest spells, the temperature around the lake can drop to as low as -30 degrees. The lake freezes over in December and remains fully frozen until around mid-April. At the peak of winter, the ice covering the lake can reach a thickness of 1 meter.

\*Based on local weather readings collected between 1991 and 2020