

## The Tradition of Prescribed Burning

Spring has arrived, and the slopes of the Hiruzen Highlands are burning—but there is no need to panic. These are not raging wildfires, but controlled burns that help to preserve the biodiversity of the grasslands as well as the local way of life.

A semi-natural grassland is an ecosystem where humans and nature strike a mutually beneficial balance. Human activities such as mowing and livestock pasturing prevent grassland from reverting to forest, maintaining a biosphere suitable for grassland plants and animals. Globally, the amount of semi-natural grassland is decreasing as livestock husbandry moves away from natural grazing and former pasturage is converted into arable farmland. Grasslands currently make up about 1 percent of Japan's land area—only a third of what it was in 1960. This means their preservation is particularly critical.

In Hiruzen, the local custom of controlled burns, called *yamayaki*, is maintaining semi-natural grasslands where species like the balloon flower (*Platycodon grandiflorus*) and Siebold primrose (*Primula sieboldii*)—both endangered in the wild—can still be found. These managed, low-intensity fires, which are carried out just after the spring thaw, do not raise subsurface temperatures to the degree that wildfires do. As a result, the roots and seeds of grassland plants survive, soon springing back to life in an environment cleared of light-blocking ground cover and tree saplings. The blackened ground also absorbs more sunlight, raising the soil to temperatures advantageous for germination and lengthening the growing season.

The tradition of controlled burns is deeply connected to life in Hiruzen. In the past, the grasslands served as pasture for horses and cattle, and the grasses harvested there provided thatch for roofs and much-needed fertilizer for agriculture. The grasses were also used to make *yukigakoi*, or “snow fences,” wooden slats interwoven with reeds to protect dwellings from the weight of accumulating snow. The Hiruzen grasslands were managed as a common community resource, so local people gathered each spring and worked together to maintain and preserve them. Although the practice is no longer essential to residents' survival, local volunteers still gather to carry out the burns, both to continue a treasured tradition and to help preserve a fragile and unique ecosystem. *Yamayaki* is usually performed in late March or early April, depending on the weather. Visitors are welcome to participate in this important part of Hiruzen culture.