

Animal Life of the Tanigawa Mountain Range: the Food Chain

The Tanigawa Mountain Range is inhabited by a variety of plants and animals who eat and are eaten by each other, forming a continuous cycle of predation called a food chain. Golden eagles are at the top of this food chain. Their prey includes Japanese hares, copper pheasants, snakes, and other animals, but they have no natural predators themselves. They hunt in the high-altitude meadows and shrublands in the summer, and in the deciduous forests during winter. Because of the wide-ranging territories occupied by the eagles and the variety of animals they eat, the number of golden eagles can be used as a gauge for the overall health of the ecosystem. Species that function in this way are called “umbrella species.”

Eagles hunt from the air, using their large wingspans to glide on ascending air currents over broad areas in search of prey. For this reason, it is unusual for them to inhabit mountainous, forested areas. The golden eagles that inhabit the Tanigawadake Mountain Range are the smallest in the world, and their smaller size allows them to move and hunt even among the trees. Golden eagles also live, breed, and hunt in pairs, and the eagles of Mt. Tanigawadake will often coordinate when hunting in the forested terrain.

In recent decades, the eagle population in Japan has gradually decreased. Since 1991, only 20 percent of eaglets have grown strong enough to leave their nests—a marked decrease since the 1980s. Beginning in the 1950s, a number of afforestation policies were introduced to meet the growing need for timber. However, when the demand for lumber went away, many such plots were left untended and became dense, dark forest where the eagles cannot hunt to feed their young. As part of the Akaya Project, a forest revitalization effort that began in 2003, the planted forests of cedar and larch are being cleared to create healthy forest where the eagles can thrive.

The trees and plants that make up the forests are not only a vital habitat; they also form the base of the food chain. The nuts of the beech trees sustain a variety of animals, including squirrels and Japanese macaques. In spring, the beech trees sprout new buds that are an important food source for Asian black bears emerging from winter hibernation. When the trees die, insects such as stag beetles lay eggs in their fallen logs, and the decaying trees become food for fungus.