

The Squirrel and the Tree

Abert's squirrels live in only one habitat—the ponderosa pine forest. These squirrels depend on ponderosa pine for the essentials of life. Abert's squirrels build nests high up in these trees. The nests look similar to a large, messy bird nest. They either construct a ball-like mass of twigs from pine or build their nests within "witches'-brooms," growths of small pine twigs infected by dwarf mistletoe. Since Abert's squirrels do not hibernate, they use their nests year-round. They sleep in the nest at night and use it to hide from predators during the day.

Most of the Abert's squirrels' diet is made up of parts of the ponderosa pine. In warm months, it eats the tree's buds and cones. They turn the pine cone slowly, like the way people eat corn on the cob, peeling away the cone scales to reach the meaty seeds. Often, they eat their cones in a favorite spot on a branch in the tree. A pile of cone scales under a ponderosa pine is a sure sign that Abert's squirrels live there. In the winter the squirrels eat the inner bark of the tree. They also eat mistletoe and fungi growing on the tree.

Abert's squirrels clearly benefit from the trees. What do the ponderosa pines get from this relationship? When Abert's squirrels dig up and eat a certain fungus growing around the roots of the tree—Ectomychorrhizal fungus—they disperse spores. This helps the fungus reproduce. The fungus benefits Ponderosa pines by growing around the roots of the trees and helping the trees to maintain moisture in a dry environment.

