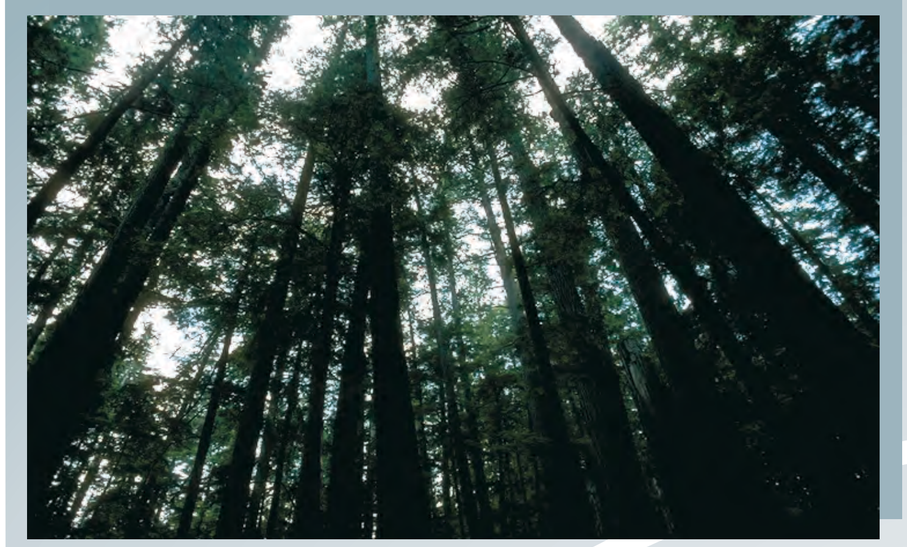
The Shelterwood System



Mid-tolerant trees

are those that can tolerate partial shade as saplings, but also require some sunlight in order to thrive. They include tree species such as oak, ash, hemlock and white pine. Forest stands that are dominated by mid-tolerant species tend to be "even-aged" - that is, most of the trees are the same age.

A mature, "even-aged" stand of mid-tolerant trees.

Thinning and tending operations may occur to improve the stand.

Final Removal

The majority of the remaining mature trees are removed to release the young trees that have become established.

Prep Cut

The first cut, done when trees are 60 - 80 years old, opens up the forest "crown" by removing diseased trees and competing species like white birch and poplar.

First Removal

When a dense carpet of seedlings has become established, about half of the remaining "stems" are removed. This creates the partial sunlight conditions required for seedling development.

Seed Cut

This cut, performed when trees are 80 - 100 years old, opens the crown to about 50% cover and leaves the best seed-bearing trees. The seed cut may be combined with the prep cut.

The shelterwood silvicultural system

is used with "mid-tolerant" species. It involves the complete removal of a stand in a series of cuts, while a new stand develops in the partially shaded "understory". It mimics major, natural disturbances such as wind, fire and insects, that leave large gaps in the forest canopy where mid-tolerant species can thrive. It produces an even-aged stand of trees.