

Thinning Plantations

For many Island land owners, planting trees is an important part of their forest management plans. They plant to select the species that will renew the site and provide proper spacing for optimum growth and development. Over the last several decades, thousands of Island land owners have planted millions of trees on harvest sites, abandoned old fields, riparian zones and other places that benefit from tree cover.

Unfortunately many owners simply planted the seedlings and walked away expecting them to fend for themselves. Even though they were planted with proper spacing for their early growth, as they get larger each tree requires additional root space, nutrients, water and sunlight and therefore, active management is still required to ensure the planting investment is protected.

Most natural stands in the Acadian Forest are composed of trees of different heights, ages and species. These differences can provide natural advantages to some trees or species and impediments to others. Which ones ultimately succeed depends on many long term factors such as tree age, height, health as well as soil fertility and moisture conditions. On the other hand, most planted stands (usually called plantations) tend to be very homogeneous because all of the trees are the same age, size and species. Therefore, the ability of these trees to gain advantage tends to be very limited and can mean that without an intervention, tree growth will begin to stagnate.

The most common intervention method is called a thinning. It occurs when the tree crowns begin to crowd each other and the lower branches start to die off from lack of sunlight. In plantations, this is usually when the trees are about 15 - 20 years old. In most cases the land owner chooses to remove every third row of trees to allow more sunlight into the stand, provide more growing space for the remaining trees and create a haul road to permit access and product removal. The first thinning is also considered to be pre-commercial because trees are too small to make any saleable products, so some land owners chose to leave the harvested trees to decay and enrich the soil.

The next thinning occurs in another 15-20 years and because the trees are much larger, the second thinning is a commercial thinning. Stand conditions allow the removal and sale of individual trees. This improves the overall quality of the stand and encourages crown and root development to maintain growth and development. The increase in sunlight reaching the forest floor also encourages new forest plants, shrubs and shade tolerant tree species. In years to come, additional thinnings will occur. Each one should generate higher value products, create growing conditions for new species and eventually, if the landowner wishes, replace the plantation with a more natural stand.

Spring is an excellent time to visit your forest and see how your trees are growing. The Forest Enhancement Program www.gov.pe.ca/forestry/fep provides information and incentives to land owners who want to thin forest stands including plantations.