

Some of the best growing sites exhibit the densest thickets of trees. It is not unusual for some softwood thickets to contain over 30,000 trees per hectare (>12,000 trees per acre).

Forest professionals can identify pre-commercial thinning sites and take the measurements that are necessary to set the appropriate financial assistance rates. If you have questions about pre-commercial thinning or any other silviculture treatments, forest professionals can offer valuable advice.



*A Quick Guide to*

## **PRE-COMMERCIAL THINNING (PCT)**



**FAMILY WOODLOT GUIDE**

***For detailed information, please visit the following resources:***

### **NS Department of Natural Resources**

[www.gov.ns.ca/natr/woodlot](http://www.gov.ns.ca/natr/woodlot)  
1-866-226-7577 [woodlot@gov.ns.ca](mailto:woodlot@gov.ns.ca)

### **Forest Professionals**

- Registered Professional Foresters Association of Nova Scotia [www.rpfans.ca](http://www.rpfans.ca)
- Nova Scotia Forest Technicians Association [www.nsfta.ca](http://www.nsfta.ca)
- Canadian Institute of Forestry [www.cif-ifc.org](http://www.cif-ifc.org)

### **Woodlot Owner Organizations**

- Federation of Nova Scotia Woodland Owners [www.fnswo.ca](http://www.fnswo.ca)
- Nova Scotia Landowners and Forest Fibre Producers Association [www.nslffpa.org](http://www.nslffpa.org)
- Nova Scotia Woodlot Owners and Operators Association [www.nswooa.ca](http://www.nswooa.ca)

### **Harvesting and Silviculture Contractors**

- Nova Forest Alliance [www.novaforestalliance.com](http://www.novaforestalliance.com)
- Atlantic Master Loggers [www.cwfcf.org](http://www.cwfcf.org)

### **Silviculture Assistance**

- Association for Sustainable Forestry [www.asforestry.com](http://www.asforestry.com)

### **Woodlot Road Assistance**

- Forest Products Association of Nova Scotia [www.fpan.s.ca](http://www.fpan.s.ca)

If your woodlot contains areas of relatively young, dense thickets of trees, their rate of growth can be increased by thinning. This silviculture treatment, similar to thinning carrots in a garden, allows the best crop trees to obtain more sunlight, growing space, water and nutrients.



*Thicket prior to thinning*

Because the trees have not yet reached a size where they are commercially marketable for timber, this treatment is called pre-commercial thinning (PCT). Thinning can be carried out in stands of natural or planted trees that are of similar age and size.

Trees receive the most benefit from pre-commercial thinning when they are less than 20 years old and softwoods are 2-6 m (6-20 ft) tall and hardwoods are 6-9 m (20-30 ft) in height.

Most tree species native to Nova Scotia can be considered as acceptable crop trees.

Mixed stands of softwood and hardwood are common in the province, and pre-commercial thinning can be used to help conserve this diversity.

Where softwood plantations have been established but have been overgrown by natural softwood and hardwood trees, it is preferable to maintain as many healthy planted softwood trees as possible during thinning.



*After thinning*



Pre-commercial thinning is usually carried out with a clearing saw, also called a spacing saw, which enables the user to avoid the back strain and danger associated with a chain saw.

Softwood trees are usually spaced to 1.8 m to 2.4 m (6 to 8 ft) between trees (1,500 to 3,000 trees per hectare or 600 to 1,200 trees per acre).

Choice of crop trees is ultimately up to the woodlot owner, and long-lived, shade-tolerant spruce and hemlock are often chosen over fir and larch. Shade-tolerant hardwoods such as sugar maple, yellow birch and white ash are commonly chosen over red maple, trembling aspen and white birch. Hardwoods are usually spaced 2.4 m to 3.0 m (8 to 10 ft) between trees.

Each pre-commercial thinning job will be unique, depending on tree size, species, density and ground conditions.

Where red maple is present on a previously harvested site, it tends to sprout vigorously from cut stumps. More than 10 stems can often be found growing from the stumps: cutting them may be difficult and usually results in further sprouting.