



## Pruning: Timing is Key

While pruning may seem fairly straightforward, people typically realize that they have many questions about why, how and, especially, when to prune. On the topic of when to prune, there is debate among experts on the best time to carry out treatments. In view of the time and cost involved in pruning, it is important to adhere to a few basic principles.

### Just what is pruning?

Pruning terminology can be confusing, whether you are perusing the literature or talking with practitioners. *Pruning* is a general term used for the removal of branches from a tree for a specific purpose using recognized techniques.<sup>1</sup> *Formative* pruning is done on young trees to promote a solid structure.<sup>2</sup> Pruning may also be done to remove epicormic shoots growing on the lower part of the tree trunk.<sup>3</sup> The recommendations in this text apply to all these treatments.

### When is the best time to prune?

Pruning of trees in a stand should be undertaken when crop trees are identifiable, that is, when young trees reach a diameter at breast height (dbh) of about 10 cm. The goal of this operation is to obtain stems with knot-free wood and little taper and to limit the development of juvenile wood.

In general, pruning should be done during the dormant season in spring, that is, after the spring sap run is over and there is no further risk of severe frost. Nonetheless, at least one scientific study has recommended that pruning be done during the active growth period to ensure wound closure and thus minimize the amount of discoloured wood produced in the tree.<sup>4</sup> Dead or weak branches can be removed anytime. When it comes to diseases, however, there is no time to lose and pruning should

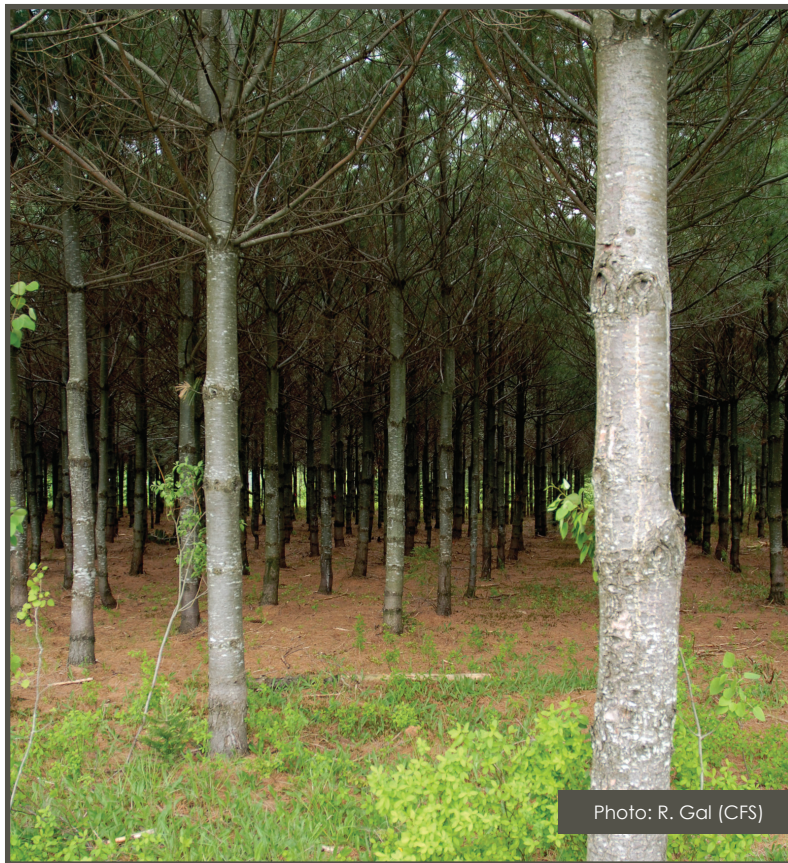


Photo: R. Gal (CFS)

be done as soon as symptoms appear (see box on the reverse side). As a rule, the removal of branches less than 3 cm in diameter should not adversely affect the tree, provided this operation is done properly. However, a tree that lacks vigour and has only a few healthy branches to carry on photosynthesis should not be pruned.

### Do the same rules apply to deciduous trees and conifers?

Conifers may be pruned any time of year. However, some experts recommend that the operation be carried out during the dormant season to minimize resin and sap flow from cut branches.

1. Société internationale d'arboriculture-Québec (2011), *Glossaire des termes arboricoles*.

2. *Ibid.*

3. Ordre des ingénieurs forestiers du Québec (2003), *Dictionnaire de la foresterie*.

4. D. Dujesiefken et collab. (2005), Response of beech and oaks to wounds made at different times of the year. *Eur. J. For. Res.* 124: 113-117.

# Branching Out

from the Canadian Forest Service - Laurentian Forestry Centre

The secretion of resin is a defence mechanism that protects the tree from injury, including cuts made during pruning.

For deciduous trees, the dormant season is an ideal time for pruning because, with the foliage gone, it is easier to identify branches that need to be removed. Once again, there are some exceptions to this rule of thumb. For example, birches and maples lose a lot of sap in the spring, so it is best to prune them during the summer or in early fall to provide enough time for callus tissue to form.



Photo: CFS

## Err on the side of caution

Opinions vary widely on the best time to carry out pruning. Moreover, few scientific studies have been done on this topic and most of the information available is based on the experience of practitioners. The safest approach is to follow the general rules and to consider the specific situation of the trees to be treated.

## Useful links

Scleroderis canker in red pine:  
<http://cfs.nrcan.gc.ca/pubwarehouse/pdfs/25078.pdf>

A simple, effective tool for controlling white pine weevil and blister rust:  
<http://cfs.nrcan.gc.ca/pubwarehouse/pdfs/32511.pdf>



Photo: CFS

## Pruning to maintain tree health

Pruning is often the only method available for managing certain pests. For example, pruning treatments in young white pine and red pine plantations can be effective for controlling white pine blister rust and scleroderis canker. Some pruning prescriptions are very specific and must be followed carefully to ensure good results. For example, elms should always be pruned in late fall or early winter to avoid attracting insect vectors of the pathogen that causes Dutch elm disease.

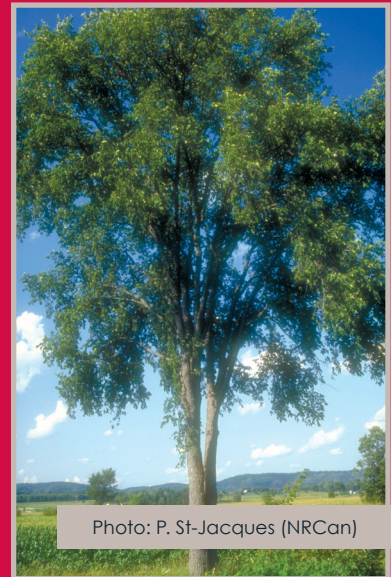


Photo: P. St-Jacques (NRCan)

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