

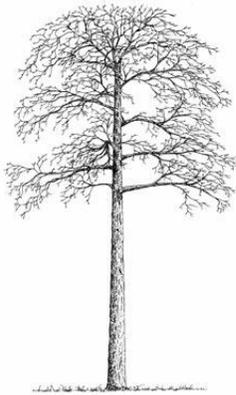
General Best Practice for Woodlots

1) Best Practice for Timber Production

Generally, forest management for timber production is a manipulation of forest composition and density to maximize growth, quality and return. In a selection system, managing for timber production is a matter of promoting diameter growth by removing low value, unproductive trees from the stand so that remaining trees have space to grow faster.

Crop trees should have straight, defect free trunks. Over time, a good forest management practices will remove many of the poorer quality trees from a woodlot.

Ideal Timber tree



- Smaller crown
- Long Straight trunk with little taper
- Trunk is free of all defects
- Multiple species

2) Best Practices for Fuelwood Production

The income value of fuelwood cut and burned on farms in Ontario is greater than any other crop harvested and consumed at home. In addition, sales of fuelwood have increased as consumer demand continues to place greater demands on farm woodlands to supply it.

Many timber harvesting operations produce significant volume of fuelwood as a secondary benefit. Fuelwood harvesting in most lots can have a positive impact on woodlot management if carefully planned and properly executed.

Harvesting the low value, low quality trees for sale as fuelwood can:

- a) Improve growing conditions for the remaining valuable crop trees
- b) Improve growing conditions for regeneration
- c) Increase the diversity of tree species in the woodlot
- d) Improve the health and vigour of the woodlot
- e) Enhance forest sustainability
- f) Produce better quality, more valuable timber for the future

As a general rule, the following trees should be removed from a hardwood woodlot for fuelwood use:

- i) Diseased, dead and dying trees,
- ii) Trees with weak forks
- iii) Crooked or leaning trees
- iv) Tree that have been over topped by others with seriously stunted growth

Wood cut and split during the fall and winter and piled in the open in the spring should be well seasoned for burning the following winter. Fuelwood should be covered to protect it from the rain while drying.

3) Best Practices for Sugar Bush Management

There are two key activities in sugar bush management that contribute to the overall productivity, health, sustainability and profitability of the operation.

- a) Thinning to develop and improve the sugar bush for maple sap production
- b) Tapping to maintain tree health and improve sap production.

Ideal maple Syrup tree



- Sugar Maple (Sometime Black Maple)
- Larger Healthy Crown
- Sweeter sap compared to non crop tree
- Trunk shape is not as important at a mature age

The crop tree selection process in the tapped sugar bush is as follows:

- i) Select young, vigorous growing maple trees that will add to the productivity of the sugar bush as soon as they reach tappable size
- ii) Select healthy trees with large crown, and no visible fork/joint that could negatively impact the growth of the tree.
- iii) Retain edge trees as they form an effective windbreak and help stop the movement of invasive and weed seeds onto the stand.

Trees to remove in improvement harvests:

- i) Over-mature, or diseased and defective maples that are no longer producing well
- ii) Lower producers – Trees producing sap with a low sugar content
- iii) Trees of other species, particularly those who are crowding Maple crop trees
- iv) Trees that are a safety hazard.

4) Best Practices for Managing Old-Growth Characteristics and Wildlife

Old-Growth forests provide important habitat for many species of plants and animals. Many land owners want to promote wildlife and/or restore or maintain some of the characteristics of old-growth forests in their woodlot.

The following are some recommendations for the aforementioned land owners:



a) **SUPER CANOPY TREES/ ISOLATED CONIFERS.** Keep tall trees such as White Pine that reach beyond the canopy. They are landmarks, nesting and resting sites for birds, as well as refuge for bear cubs.

b) **DECAYING WOOD.** Allow logs and branches to decay naturally on the forest floor – Leave at least 10 fallen logs / ha (4 logs /ac).



c) **CAVITY TREES.** Up to 25% of the wildlife in the forest use cavities for rearing young, roosting, escaping from predators, or hibernating. Retain 6 cavity trees/ha (2-4/ac) with at least 25 cm DBH. If not available, leave trees that are declining and should become cavity trees eventually.

d) **MAST TREES.** Up to 25% of wildlife species, eat fruit and nuts from trees. Leave trees that produce edible fruit and nuts such as oak, Black Cherry, Basswood, Beech, Butternut, Black Walnut, Hickory and Ironwood. Leave 7-8 mast trees/ha (3/ac), preferably with a DBH greater than 25 cm, and with large crowns.

