

# WHITE CEDAR

## Cover Type Guidelines

### **ROTATION AGES**

<u>Site Index</u>	<u>Rotation Age</u>	<u>Product</u>
30 and below	120+	Posts
31-40	130+	Posts
41-50	110+	Posts
51-60	90+	Poles/Logs
61+	80+	Poles/Logs

### **HARVEST SYSTEMS**

Strip or patch cuts 4 chains or less from prevailing wind seed source.

Eliminate other softwood (spruce, balsam and tamarack) seed sources if a mixed stand component is not desired.

### **REGENERATION SYSTEMS**

Plan for natural seeding from adjoining stands on seed beds (hummocks, mosses, disturbed organic or mineral soil) with adequate moisture.

Container grown nursery stock used in underplanting is showing promise in artificial regeneration programs.

Direct seed with proper seed bed conditions.

### **PEST CONSIDERATIONS**

Compared to most other species, northern white cedar is a relatively insect and disease free species. There are no insects which cause significant damage. The black carpenter ant has caused some damage by attacking the heartwood of living trees, but this is always in trees which already have been extensively attacked by wood rotters. Wood rotting fungi *Pori subacida* causing white stringy butt rot and *Polyporus spp.* causing brown cubical rot; however, can be a serious problem, mainly in over mature timber.

These are butt rotters, the rot column of which seldom extends more than 16" into the trunk of the tree. This has resulted in a volume loss of approximately 25-30% in cedar managed for sawbolts. This is because much of this type has been high-graded in the past and the remaining timber is over mature.

Specific management recommendations are listed below:

1. Northern white cedar grows best on shallow, well-drained, slightly alkaline, well-decomposed organic soil and on moist, though well-drained slightly alkaline mineral soil. Sites other than these should be considered for management for other species such as tamarack, balsam fir, and black spruce.
2. To avoid wood rotting problems, grow stands to recommended rotation ages of approximately 80 years on good sites and 90 years on medium sites. Better site stands which show indications of much rot should be cut as soon as practical considering the need for the establishment of advance regeneration. Much of the time it is very difficult to determine the presence of rot; however, possible indicators of internal rot are the presence of basal fire scars, frost cracks, wind cracks, pine knots on the lower trunk, injuries to exposed roots, and woodpecker holes.
3. To maintain vigor and to provide for advance regeneration, thin stands to 130 square feet of basal area at middle-age and to 90 square feet at 10 year intervals until rotation age.

### **WILDLIFE CONSIDERATIONS**

Upland stands and rims of lowland stands provide excellent winter cover for white tail deer and provides needed browse during severe snow winters.

This is an important species for wintering deer yards. Extend rotation ages for maintaining stands in or near these areas as needed.

Stands located adjacent to trout streams provide cover and cooling effect to water. Withhold them from harvest.

Mice, hare, and deer browse are main source of damage to seedlings.

### **PREFERRED SITE CONDITIONS**

White cedar occurs on a very wide range of site conditions; from very poorly drained organic soils to well drained mineral soils. Best growth will occur with the following site characteristics:

Lowland:

- well decomposed peat derived from woody plants or sedges
- pH of 6.5 - 7.8
- good water movement
- ground water high in minerals

Upland:

- constant moisture supply
- somewhat poor to well drained soils
- good aeration
- medium to fine textures high in calcium