



What is a Chicot?

Regulation 851, Regulations for Industrial Establishments, provides the following definition for a chicot:

Section 103

“chicot” means

- (a) A dead tree, or
- (b) A dead limb of a tree that may endanger a worker.

This definition is broad and includes trees that are wholly dead, but also partly dead. They may be dry and brittle on a few branches or just at the top of the tree. Trees that are rotted through at any point are also considered chicots.

Chicots

All dead trees eventually fall when they become weak enough. But before they do, they may stand as silent traps, waiting only for the bump of a passing skidder, a push from the branches of a nearby tree being felled, or even just a gust of wind before falling suddenly to the ground.

All chicots must be lowered to the ground before any work can proceed in the immediate felling area.

How do you handle chicots?

1. Find Them.
2. Mark Them.
3. Eliminate Them.

How do you handle chicots?

1. Finding Chicots

Experienced loggers need to evaluate the presence and condition of chicots in the cutting, skidding and landing area of their worksite. You must also have a strong awareness of how the weight and vibration of heavy mobile equipment will affect surrounding trees and soil stability. Loggers should continuously be on the lookout for:

- An absence of leaves (consider the season)
- Missing twigs and small branches
- Trunks or main branches that have:
 - Presence of shelf-life fungus growth
 - Detached bark
 - Easily visible cracks along the trunk
 - Canker growth on the trunk
 - Insect infestation
- Signs roots may have rotted out, such as:
 - Mushrooms growing at the base of the tree
 - Black filaments under the bark
 - Spongy material at the base of the tree
- Changing weather conditions, such as:
 - Excessive wind
 - Snow or ice-loading on trees
 - Soil rapidly freezing and thawing (spring and fall)

2. Marking Chicots

Once chicots are found and determined to be within the danger zone of the felling area, they must be removed. If a skidder will be used to fell the chicot they can be marked for easy identification by the supervisor by painting a brightly-coloured “X” on the trunk, or if identified by a cutter, and the chicot is solid, by scaring the trunk with a chainsaw. These markings will assist the skidder operator in identifying and removing the chicot as soon as possible.

3. Eliminating Chicots

Ideally chicots are removed with a skidder. If this is not possible, they can be felled by a chainsaw.

Using a skidder

Each chicot will be different, and may require consultation with supervisors and co-workers to determine a best approach. In general, the safest way to fell a chicot is to use the skidder to push the chicot over. The operator should slowly back up to the tree and use the skidder’s fairlead (the highest point on the skidder) to push the chicot over in the direction of the chicot’s lean.

In some cases when the chicot is large and dry, the tree may become uprooted when the skidder starts to push. It may be necessary to notch and partially backcut the chicot to ensure the tree breaks.



Using a chainsaw

When felling a chicot without the help of a skidder to apply the final push, cut it at waist level, not at knee level. At knee level, you cannot see falling hazards because of your crouched position - keep looking up! Notch the chicot to 50 percent of the diameter of the tree. Have a second person positioned nearby (but outside the danger zone) to also warn the chainsaw operator if any part of the chicot is starting to fall. Do not try to change the direction of the fall with a wedge or felling bar. Be sure to watch out for rotten or hollow centres. You cannot count on holding wood in a chicot, so be prepared to start your retreat at any moment.

Our Vision: Every worker, home safe and healthy.

HAZARD ALERT!

WHAT HAPPENED?

On December 13, 2011, an experienced 68-year-old skidder operator finished clearing a trail, and as he exited the skidder, a birch chicot fell and fatally struck him. Exactly one year and one week later, on December 20, 2012, a skidder operator was pulling logs from a woodlot and the load hit a standing tree. The tree immediately fell and a 21-year-old worker was unable to escape its path. Since 2009, there have been 47 'struck by' injuries in the Ontario logging industry.

WHY DID IT HAPPEN?

The leading cause of death and serious injury to people cutting timber is still the most obvious one - being hit by a falling tree. A chicot is a tree that has either become dry or rotten for various reasons, either from normal aging or special conditions such as species extinction, climate, insect infestation, disease, or human activity. Chicots present a tremendous hazard in the woods and need to be treated with respect.

These trees are dangerous because they are brittle and unpredictable. A gust of wind, vibration from equipment, a heavy snowfall or removing adjacent trees is often all that is needed for branches to fall suddenly from these trees, causing great harm.

HOW COULD IT HAVE BEEN PREVENTED?

If you enter a work area or work within the danger zone of a chicot, hang-up, or freestanding tree, you are exposing yourself to the danger of an uncontrolled falling tree and contravening legislative requirements to remove chicot hazards.

During harvesting, chicots must be safely lowered to the ground prior to felling in the vicinity. If a chicot is selected to remain standing for the purpose of a wildlife tree, then no trees can be harvested within its vicinity, i.e. a radius equal to at least the height of the surrounding stand.

Chainsaw and skidder operators in a logging operation must be certified in the Ministry of Training, Colleges and Universities mandatory Cutter Skidder Modular Training Standards course. They must also receive workplace specific training by their employer in all aspects of the work they perform, including policies and procedures for safe felling of problem trees and other cutting hazards that might arise when working alone.

For more information, call Workplace Safety North toll-free in Ontario.

DID YOU KNOW?

- In the past two years, two Ontario workers were killed by falling trees.
- Chicots - or dead trees - are notoriously unstable, and known as "widow-makers."
- A gust of wind, vibration from equipment, heavy snowfall, or freezing and thawing soil can suddenly cause a chicot to fall.
- The law says all chicots in the danger zone must be safely lowered to the ground before you begin harvesting trees.
- If a chicot is left standing, trees in the immediate danger zone may not be harvested until the hazard is removed.
- Chainsaw and skidder operators must be certified in MTCU Cutter Skidder Modular Training Standards course.

Safety Checklist for Chicot Removal

1. Worksite Risk Assessment		
	Recognize	Date completed + initials
a.	Confirm work area	
b.	Identify hazards in work area	
c.	Identify and mark chicots	
	Assess	
d.	Determine safest method for removing chicots:	
	i. Skidder or other equipment	
	ii. Chainsaw - (chicots may not be solid, cut while observing hazards)	
	Control	
e.	Remove chicots as per discussion and protocol. Factors to consider:	
	i. Approach chicot with caution	
	ii. Stay out of the danger zone	
	iii. Observe wind conditions	
	iv. Safest direction to fall (direction of lean)	
f.	When using a chainsaw to remove chicots:	
	i. Cut at waist level to keep an eye on the potential of falling hazards	
	ii. Notch the chicot to 50 percent of the diameter of the tree	
	iii. Do not change the direction of the fall with a wedge	
	iv. Be prepared to retreat along your planned retreat path	
	v. Continually observe the chicot and surrounding hazards	
	Evaluate	
g.	Ongoing site assessment (presence of problem trees)	
2. Worker Safety Training		
a.	Valid Cutter-Skidder Certification	
b.	Refresher training on dealing with problem trees including chicots	
3. Supervisor Safety Training		
a.	Hazard Recognition Training	
b.	Competent Supervisor Training	
c.	Ongoing coaching and enforcement	
d.	Frequent, ongoing site assessment - presence of problem trees	