

## Teaching Outline: Handfalling in Narrow Corridors

<b>Date:</b>	
<b>Teaching Topic:</b>	Handfalling in Narrow Corridors
<b>Type of Session/Audience:</b>	Tailgate Session Fallers/Bullbuckers, Planners
<b>Session Length:</b>	15-20 minutes
<b>Materials Required:</b>	<ul style="list-style-type: none"> <li>• OHS regulations for reference (see appendix 2)</li> <li>• Flipcharts and pens</li> <li>• Narrative notes from video (see appendix 1)</li> <li>• Video: Communication Between Phases - Handfalling In Narrow Corridors</li> <li>• Computer/TV with DVD player to play video</li> </ul>
<b>Session Requirements:</b>	<ul style="list-style-type: none"> <li>• Meeting room of sufficient size to comfortably seat the size of the group</li> <li>• Instructor will need to take notes of discussion items</li> <li>• Instructor will need to take note of any unresolved questions and seek answers</li> </ul>
<b>Learning Objectives:</b>	<ul style="list-style-type: none"> <li>• To discuss issues related to handfalling narrow corridors</li> <li>• To emphasize the importance of communication</li> <li>• To ensure that regulations need to be followed no matter the cost</li> </ul>
<b>Class Outline &amp; Suggested Times:</b>	<ul style="list-style-type: none"> <li>• Introduce and explain the purpose of this module (1-2 minutes)</li> <li>• Present video (3:34 minutes)</li> <li>• Present teaching notes (8-10 minutes)</li> <li>• Open up Discussion (4-5 minutes)</li> <li>• Competency Evaluation (2-3 minutes)</li> <li>• Closing remarks (1-2 minutes)</li> </ul>

## Detailed Class Outline:

<p><b>1. Introduce and explain purpose of the module</b></p>	<ul style="list-style-type: none"> <li>• To discuss potential safety issues when falling narrow corridors.</li> <li>• To re-inforce the importance of communication</li> </ul>
<p><b>2. Present Video</b></p>	<ul style="list-style-type: none"> <li>• Communication Between Phases - Handfalling In Narrow Corridors</li> </ul>
<p><b>3. Present Teaching Notes (see Appendix 1)</b></p>	<ul style="list-style-type: none"> <li>• Highlight main ideas from the video that will help lead your discussion</li> </ul>
<p><b>4. Open up Discussion, using the following as a guide</b></p>	<ul style="list-style-type: none"> <li>• What issues are we facing in regards to narrow corridors?</li> <li>• How could those issues have been eliminated or made less problematic?</li> <li>• Discuss how we are able to maintain qualified assistance when there is not enough room for two fallers to work?</li> <li>• Can you think of any other hazards that exist but were not mentioned by the video?</li> </ul>
<p><b>5. Competency Evaluation</b></p>	<ul style="list-style-type: none"> <li>• List and explain some of the things that this video said that you can be doing to improve working with narrow corridors.</li> <li>• What needs to happen if a faller feels the block boundary is causing a safety concern?</li> </ul>
<p><b>6. Closing Remarks</b></p>	<ul style="list-style-type: none"> <li>• Reminder: if you are not sure - stop, call partner/supervisor.</li> <li>• Regulations must always be followed.</li> <li>• Ensure the plan is understood by all concerned.</li> <li>• Avoid layout with sharp edges and widths less than two tree lengths.</li> </ul>

## Appendix 1: Handfalling In Narrow Corridors FACILITATOR NOTES

### KEY THEME:

Handfalling narrow corridors present potential hazardous conditions, it important that fallers and other phases communicate with one another to understand how to effectively and safely fall timber in narrow corridors. It is important that all potential risks are assessed and the work is planned to ensure it can be conducted safely.

### VIDEO NARRATIVE NOTES:

The layout of narrow corridor blocks leads to safety concerns for fallers, in particular falling boundaries that don't follow the contours or have jags in the falling boundary.

The layout of blocks must keep safety in mind at all times and where possible be laid out in such a way that two fallers can safely fall the setting. If planners are not sure they need to discuss with the fallers/bullbucker.

The falling of the corridor must meet regulation. If workers are likely to be exposed to a situation where regulation can't be met work must cease immediately.

Communication between fallers, supervisors and planners is extremely important.

It is important that from the top down that we re-enforce to the faller that safety is first and foremost.

There are also different hazards associated with falling second growth narrow corridors as opposed to old growth narrow corridors.

For example:

- 2nd growth has an abundance of self-thinning snags
- Small diameter but tall trees are hard to wedge and control
- Abundant matrix of rotten ground debris from 1st pass logging
- Lower volume per stem incurs productions pressures
- Presence of deciduous trees (sweep to light, often not straight)
- Stand is highly reactive to wind

If talk is presented solely to engineering crews or planners someone with a falling background should be available to among other things point out some different issues with timber type.

## Appendix 2: Handfalling In Narrow Corridors FACILITATOR NOTES

### RELEVANT FALLING REGULATIONS - Part 26 Forestry Operations and Similar Activities MANUAL FALLING AND BUCKING:

#### 26.2 Planning and conducting a forestry operation

(1) The owner of a forestry operation must ensure that all activities of the forestry operation are both planned and conducted in a manner consistent with this Regulation and with safe work practices acceptable to the Board.

(2) Every person who has knowledge and control of any particular activity in a forestry operation must ensure that the activity is both planned and conducted in a manner consistent with this Regulation and with safe work practices acceptable to the Board.

(3) The planning required under this section must

(a) include identification of any work activities or conditions at the workplace where there is a known or reasonably foreseeable risk to workers,

(b) be completed before work commences on the relevant activity, and

(c) be documented at the time of planning.

(4) If, after any planning referred to in subsection (3), there is a change in the workplace circumstances, including the work activities and the conditions of the workplace, and the change poses or creates a known or reasonably foreseeable risk to workers that was not previously identified, then

(a) the plan must be amended to identify and address the risk and provide for the health and safety of the workers at the workplace, and

(b) the amendment must be documented as soon as is practicable.

#### 26.23 Procedures for falling and bucking

(1) In this section and in section 26.24, "brushing" means the striking of a standing tree by a tree being felled if the strike is a direct blow or a glancing blow of sufficient force to cause one or more branches to break at or near the stem of the standing tree.

(2) Fallers and buckers associated with falling activities must be provided with and follow written safe work practices acceptable to the Board for the type of work activity they perform, including procedures for the following:

(a) establishing minimum and maximum distances between fallers and other workers;

(b) planning and constructing escape routes;

(c) controlling the fall of trees;

(d) minimizing unnecessary brushing;

(e) dealing with dangerous trees;

(f) bucking trees and logs;

(g) using mechanical assistance to fall trees;

- (h) summoning and rendering assistance to manage a falling difficulty or to deal with an emergency;
- (i) conducting special or innovative harvesting techniques;
- (j) ensuring the well-being of each faller and buckler at least every half hour and at the end of the work shift.

#### 26.24 Responsibility for falling and bucking

- (1) Subject to section 26.29 (3), before a tree is felled, all workers must be clear of the area within a 2 tree-length radius of the tree.
- (2) Before falling or bucking starts, all obstructions to the activity must be cleared and a safe escape route to a predetermined safe position must be prepared.
- (3) A tree must not be felled if it could strike any stationary or running line of any operational equipment.
- (4) If it is necessary to pack or shovel snow to reduce stump height, the depth of the depression at the base of the tree must not exceed 45 cm (18 in.).
- (5) The falling of a tree must be conducted in accordance with the following procedures:
  - (a) a sufficient undercut must be used;
  - (b) the undercut must be complete and cleaned out;
  - (c) sufficient holding wood must be maintained;
  - (d) the backcut must be higher than the undercut to provide a step on the stump;
  - (e) wedging tools must be immediately available and, unless the tree has a pronounced favourable lean, wedges must be set.
- (5.1) When a tree is being felled, the tree must not brush standing trees if that can be avoided.
- (6) A tree must not be used to cause another partially cut tree to fall in succession unless
  - (a) it is necessary to do so to overcome a specific falling difficulty, and
  - (b) the succession falling is done in accordance with subsection (6.1).
- (6.1) The following apply for the purposes of subsection (6):
  - (a) only one tree may be used to cause another partially cut tree to fall in succession;
  - (b) only those trees necessary to deal with the falling difficulty referred to in subsection (6) are partially cut;
  - (c) a wedge is driven into the backcut of each partially cut tree.
- (7) When a tree starts to fall, the faller and any other worker present must move quickly to a predetermined safe position, at least 3 m (10 ft) away from the base of the tree where possible, and take cover if available.
- (8) All workers must be clear of the hazard area before a tree or log is bucked.

#### 26.25 Dangerous trees and logs

- (1) Falling or bucking must not be started if
  - (a) a tree or log is in a condition that, if felled or bucked in that condition, the tree or log would pose a reasonably foreseeable risk to a worker, or
  - (b) it appears that the tree cannot be completely felled or the bucking cut cannot be completed, as the case may be.

- (2) If for any reason a partially cut tree cannot be completely felled and must be bypassed or left unattended, then the following apply:
- (a) the tree must be clearly marked;
  - (b) work, other than that necessary to complete the falling of the tree, must stop in the hazard area until the tree is felled;
  - (c) any worker who could enter the hazard area must be alerted to the hazard;
  - (d) the supervisor for that falling activity must be notified.
- (3) The supervisor referred to in subsection (2) (d) must ensure that
- (a) all workers at risk are notified, and
  - (b) the tree is safely felled before other work is undertaken in the hazard area.
- (4) If a bucking cut cannot be completed and the partially bucked log must be bypassed or left unattended, then the following apply:
- (a) if possible, a distinct cross must immediately be cut or marked on the top of each end of the log;
  - (b) the supervisor for the bucking activity must be notified at the end of the work day;
  - (c) the supervisor for the bucking activity must notify all workers at risk.
- (5) Subsections (2) to (4) do not apply if the incomplete falling or bucking is part of a planned process in which safe work practices acceptable to the Board are implemented.

#### 26.26 Falling dangerous trees

- (1) Where practicable, dangerous trees must be felled
- (a) progressively with the falling of other timber but before falling adjacent live trees, and
  - (b) into open areas.
- (2) When falling a dangerous tree,
- (a) dangerous bark must be removed, where practicable,
  - (b) stump height must, in the judgment of the faller, allow maximum visibility and freedom of action,
  - (c) the tree must be felled in the direction of lean whenever possible, and the undercut must be as deep as necessary to minimize the use of wedges and resulting vibration,
  - (d) pushing with a green tree must only be undertaken to overcome a falling difficulty, and
  - (e) wedging over must be used only if there is no alternative, and after a careful assessment of the ability of the dangerous tree to withstand wedging.
- (3) If conventional methods cannot be safely employed to fall a dangerous tree, blasting or other acceptable methods must be used.
- (4) Falling, bucking or limbing activities must not be undertaken in an area made hazardous by a dangerous tree, or a dangerous tree which has been brushed by a felled tree, until the dangerous tree has been felled.

#### 26.27 Location of fallers

- (1) Fallers and buckers must not work in a location where they or other workers could be endangered by that work.
- (2) If an elevation or steep slope poses a risk to a faller, the faller must be provided with and use an appropriate fall protection system.

(3) Any fall protection provided under subsection (2) must not impede the ability of the faller to move to a predetermined safe position as required in section 26.24 (7).

(4) A faller must not work in a location where the faller is supported solely by a lifeline and harness.

#### 26.28 Summoning assistance

(1) Qualified assistance must be readily available to fallers in case of difficulty, emergency or injury.

(2) Fallers and buckers must have an effective means to summon assistance.

#### 26.29 Entry to falling area

(1) Only a worker with duties associated with the falling activity may enter an active falling area.

(2) Before entering the active falling area, workers must notify the faller or buckler and wait until advised by the faller or buckler that it is safe to enter.

(3) A worker, in addition to the faller, may be at the base of a tree being felled if the worker is

(a) supervising or directing the falling activity,

(b) training as a faller, or

(c) required to assist the faller to overcome a specific falling difficulty.