

**On-Site Orientation** 

# Cutter

Ministry of Training, Colleges and Universities

**On-Site Orientation** 

# Cutter

# **Program: # P750010**

Development Date:October 2008Implementation Date:April 2009

This document is the property of the trainee/employee named inside and represents the official record of his/her training.

## **CONTENTS**

## PAGE

Preface	1
Notice/Declaration for Collection of Personal Information	2
Employer Notice Completed On-Site Orientation: Worker and Employer/Designate Verification	.3
On-Site Orientation	1-17

#### **PREFACE**

The Workplace Training Branch of the Ministry of Training, Colleges and Universities (MTCU) developed this equipment-specific orientation document, in consultation with representatives from the logging industry. It is intended to be used by employers for onsite orientation of their workers/trainees before registration to the on-the job training or operating the machine related to their duties.

The care and maintenance of this document is the joint responsibility of the worker/trainee and the employer. The document is an official record of a worker's/trainee's orientation.

Employers or designates and workers/trainees are required to attest to successful on-site machine specific orientation by filling their names and signing on the appropriate lines.

#### **NOTICE/DECLARATION FOR COLLECTION OF PERSONAL INFORMATION**

- 1. This information is collected under the authority of the Order-In-Council Number 701/85.
- 2. The information is collected for the purpose of administering this modular training program within the Province of Ontario.
- 3. Questions regarding collection and use of this information may be directed to:

Director Ministry of Training, Colleges and Universities Service Delivery Branch 33 Bloor St. E 2<sup>nd</sup> Floor Toronto, Ontario M7A 2S3 416 326-5605

#### CUTTER

#### <u>NOTE</u>

This guide and checklist is designed to refer employers and employees to the most obvious and critical component in each skill area. However, since chainsaw model and make vary greatly, the primary reference material for specific chainsaw safety related operating requirements should be the operator's manual supplied by the manufacturer of the chainsaw in question.

**Employer Information:** 

Company:

Address:

Telephone:

#### **Completed On-site Orientation Checklist: Worker and Employer/Designate Verification:**

Identifying hazards in the felling area
Equipment check
Fuel and oil
Plan and organize felling pattern
Observe cut boundaries
Verify tree species
Observe danger zone
Start Chainsaw
Dealing with compression and tension, push and pull, and kickback
Carrying the saw, grip and stance, cutting with the saw
Felling
Limbing and bucking
Dealing with problem trees
Worker Name Please Print):
Worker Signature:
Date of Completion:
Employer/Designate (Please print):
Employer/Designate Signature:

#### INSPECT WORKPLACE FOR HAZARDOUS AND/OR POTENTIALLY HAZARDOUS CONDITIONS

#### **Performance Objective**

Inspect workplace for hazardous and/or potentially hazardous conditions. Take corrective action by removing and/or addressing hazard according to legislative requirements, to ensure a safe workplace.

#### **Guidelines for Performance Objective:**

- 1. Choose a convenient starting location at the woodlot cutting site.
- 2. Ensure that there is no unauthorized personnel in the work area. Access to the entire area must be posted and controlled.
- 3. Review and identify potential hazards such as chicots, hang-ups, springpoles, etc. deal with them before any other work can begin.
- 4. All PPE must be worn.
- 5. Observe all danger zones. The only time a person may be within the danger zones is if that person is supervising or providing instructions.

- Choose a convenient starting location
- Ensure that there are no unauthorized personnel in the work area.
- □ Review potential hazards
- □ All PPE must be worn
- □ Observe all danger zones.

#### **CHECK EQUIPMENT**

#### **Performance Objective**

Check cutter's equipment according to legislative requirements, manufacturer specifications and recommendations, to ensure safety of self and others.

#### **Guidelines for Performance Objective:**

- 1. Inspect all PPE: hardhat, hearing protection, eye protection, face screen, safety gloves/mitts, safety pants, hi-visibility vest and safety boots. Ensure PPE meets legislative requirements. Check for proper fit and demonstrate proper adjustment.
- 2. Ensure chainsaw safety equipment is in place and functional, check overall condition, chain tension and chain condition.
- 3. Check sawchain sharpening tools/felling aids: Check availability and condition of sawchain sharpening tools and felling aids and replace if necessary.
- 4. Review requirements for approved fuel container.
- 5. Know storage location and inspect first aid kit, fire suppression equipment and spills kit. Forest fire suppression equipment (axes, shovels, and pack pumps) as required by the Forest Fire Prevention Act.

- □ Inspect all PPE
- Check chainsaw
- Check sawchain sharpening tools/felling aids
- Check for approved fuel container
- □ Inspect first aid kit, fire suppression equipment and spills kit

#### **REFUEL AND OIL CHAINSAW**

#### **Performance Objective**

Refuel and oil chainsaw in a well ventilated area; maintaining the area free of smoking; and preventing spills or damage to the environment; according to legislative requirements, manufacturer's specifications and recommendations.

#### **Guidelines for Performance Objective:**

- 1. Make sure you have the required fire extinguisher available at the fueling site.
- 2. Demonstrate fueling saw and filling the chain oil reservoir.

- □ Make sure you have the required fire extinguisher available.
- Demonstrate fueling saw and filling oil reservoir

#### PLAN AND ORGANIZE FELLING PATTERNS

#### **Performance Objective**

Plan and organize a felling pattern by observing terrain, ground conditions and machine load limitations to prevent damage to non-target species, minimize ground disturbance and facilitate safe and efficient transportation to the loading site.

#### **Guidelines for Performance Objective:**

- 1. Identify skidway location: Check with your skidder operator to determine skidway location and any environmental or other concerns. Be aware of any potential hazards in the immediate area (i.e. chicots, hang-ups, traffic or other equipment in the immediate area, power lines, etc.).
- 2. Identify travel route: Check with your skidder operator regarding hazardous terrain that must be taken into consideration (i.e. rough terrain, slopes and inclines, drop off, wet areas, etc).
- 3. Maintain a safe operating distance between workers and equipment: Be aware of location of skidder operator, other cutters/forest users and equipment in your immediate work area. Check with your immediate supervisor and co-workers to identify appropriate danger zones for your operation.

- □ Identify skidway location
- □ Identify travel route (considering hills, swamps, etc.)
- □ Maintain a safe operating distance between workers, other forest users and equipment

#### **OBSERVE CUT BOUNDARIES**

#### **Performance Objective**

Observe cut boundaries according to established prescriptions and regulated requirements in order to prevent entry into protected and non-allocated harvesting areas.

#### **Guidelines for Performance Objective:**

Fell trees within identified boundaries: Explain boundary identification rules. (i.e. colour of ribbon, paint or other type of marking, used to identify concerns and boundaries). Observe established rules and if unsure confirm with your immediate supervisor.

#### **Component Checklist:**

□ Fell trees within identified boundaries

### **VERIFY TREE SPECIES**

#### **Performance Objective**

Verify tree species, by using tree characteristics, in order to meet product requirements.

#### **Guidelines for Performance Objective:**

- 1. Review local tree species: Consult with your supervisor regarding species of trees dealt with in your immediate work area.
- 2. Review product and company requirements or guidelines: Discuss with your supervisor the product and sorting/quality requirements for your operation.

- □ Review local tree species
- **D** Review product and company requirements or guidelines

#### **OBSERVE DANGER ZONE**

#### **Performance Objective**

Observe danger zone by keeping a safe distance between self, others, equipment and other forest users, recognizing potential hazards from falling trees, limited visibility and blind spots, according to legislative requirements and established procedures, in order to protect self and others and prevent damage to equipment.

#### **Guidelines for Performance Objective:**

Review danger zone requirements and identify site-specific hazards. Know the danger zone as it applies to felling and operating equipment near other workers and other forest users.

#### **Component Checklist:**

 Maintain a safe operating distance between workers, machinery and all other forest users.

#### START CHAINSAW

#### **Performance Objective**

Start the chainsaw using the approved methods in accordance with legislative requirements and manufacturers specifications.

#### **Guidelines for Performance Objective:**

- 1. Demonstrate the "ground start" method of chainsaw starting. Explain and demonstrate each step along the way.
- 2. Demonstrate testing of chainsaw's oiler.
- 3. Once the saw is warmed up, test the idle speed to make sure that the chain is stopped at idle.
- 4. Demonstrate testing your chain brake.
- 5. Demonstrate the "leg lock" starting method, pointing out each step along the way and again explaining why this technique is useful.

- Demonstrate the "ground start" method.
- Demonstrate testing of your chainsaw's oiler.
- □ Test the idle speed.
- Demonstrate testing your chain brake.
- Demonstrate the "leg lock" starting method.

# DEAL WITH COMPRESSION AND TENSION IN TREE, PUSH AND PULL, AND KICKBACK

#### **Performance Objective**

Deal with compression and tension in tree; push and pull; and kickback hazards to ensure safe operation and prevent injury to self and others.

#### **Guidelines for Performance Objective:**

- 1. Demonstrate the correct method for dealing with compression and tension in tree.
- 2. Demonstrate push and pull while cutting. Using a small section of log, demonstrate how the saw can pull or push while cutting the log.
- 3. Demonstrate some possible kickback situations with the saw shut off.
- 4. Take this opportunity to show what chips from a properly sharpened chainsaw should look like. Explain that chip size is the basic indicator which can be used to determine when the saw needs to be touched up or resharpened. (When the chain starts to get dull, the chips will get smaller and smaller and eventually turn to sawdust rather than chips.)

- Demonstrate the correct method for dealing with compression and tension.
- Demonstrate push and pull while cutting.
- Demonstrate some possible kickback situations.
- □ Show what chips from a properly sharpened chainsaw should look like.

#### CARRY SAW, GRIP AND STANCE FOR CUTTING WITH THE SAW

#### **Performance Objective**

Demonstrate the proper method of carrying the saw; grip and stance for cutting; balance, footing and position; cutting with the saw according to legislative requirements, to protect self and others.

#### **Guidelines for Performance Objective:**

- 1. Demonstrate carrying the saw with the engine off (at the side, bar pointing back.) Then demonstrate maintaining control over the saw by using the two-handed grip any time the engine is running and the brake is not on. . (These demonstrations must be done with the engine off).
- 2. Hold saw with two hands at all times when the engine is running and the brake is not on (such as while felling, limbing, bucking, clearing brush at the base of a tree, etc.)
- 3. Remove hand from the throttle and safety latch when not actually cutting.
  - a. If you take more than two or three steps, snap on the brake.
  - b. If you have to take one hand off the saw (to pull branches, for example) snap on the brake before taking the hand off the rear handle.
  - c. If you have to climb over anything, walk any distance or cross rough ground, turn the saw off and restart it at the next cutting position using the leg lock starting method.
  - d. Using the previously felled trees, demonstrate the key points of cutting in a "dry run" with the engine off. Give a running commentary of key points.

- Demonstrate carrying the saw with the engine off.
- □ Hold saw with two hands at all times when the engine is running and the brake is not on.
- **□** Remove hand from throttle and safety latch when not actually cutting.

#### FELL TREES

#### **Performance Objective**

Fell trees by clearing work area, determining direction of fall, the escape route, notch and backcut and retreat from falling tree, according to legislative requirements, to ensure safety of self and others.

#### **Guidelines for Performance Objective:**

- 1. Pick an uncomplicated and relatively "easy" tree to fell, and discuss each step along the way.
  - Checking for hazards (and dealing with them)
  - Observe tree from two directions to determine lean or balance
  - Choosing direction of fall
  - Clearing work area
  - Choosing and clearing the escape route
  - Clearing the danger zone
  - Demonstrate cutting a conventional notch. Point out the following elements one at a time:
    - Place the notch facing in the direction of fall using sight lines on saw,
    - Make the angle cut first
    - Turn the saw at a 45-degree angle and keep the hands and wrists straight. (Hold the forward handle at the bend in the handle.)
    - Cut with the middle of the bar.
    - Place the notch as low as is practical
    - Cut to a depth equal to one-third the tree's diameter.
    - Make the level cut second. Again, move your hands along the handle— do not bend your wrists to hold the saw on its side.
    - Let the saw "hang" from your left arm. Do not bend the left elbow.
    - Make the level cut so that it meets the angle cut cleanly.
    - Stop sawing halfway through, if necessary, to check the alignments of the cuts.
    - Check for any overcut and correct.
  - Making the backcut
  - Retreating when the tree starts to fall
  - After the tree has fallen, check for overhead hazards and spring poles

2. Read the stump and point out your findings.

- Check for hazards
- Observe tree from two directions to determine lean or balance
- Choose direction of fall
- □ Clear work area
- Choose and clearing the escape route
- □ Clear the danger zone
- Demonstrate cutting a conventional notch.
- Make the backcut
- **□** Retreat when the tree starts to fall
- Once the tree has fallen, check for overhead hazards and spring poles
- $\Box$  Read the stump

#### LIMB AND BUCK TREES

#### **Performance Objective**

Limb and buck trees, according to legislative requirements, to ensure safety of self and others.

#### **Guidelines for Performance Objective:**

- 1. Demonstrate limping calling special attention to the following points:
  - Maintaining solid footing at all times
  - Keeping the saw close to your body and do not reach out with it
  - Letting the weight of the saw rest on the tree trunk as much as possible
  - Working in an orderly, forward progression
  - Levering the saw forward to cut limbs taking special care to avoid letting the bar tip stray into solid wood causing kickback
- 2. Top trees to established guidelines. Top trees using sure footing, balanced body position, and safe saw handling methods to ensure personal safety and to control saw kickback
- 3. Measure log length with a pole or tape according to specifications.
- 4. Buck trees taking special precautions for compression and tension.

- **Demonstrate limbing**
- **D** Top trees to established guidelines
- Measure log length according to specifications
- $\Box \quad Buck \ logs$

#### DEAL WITH PROBLEM TREES

#### **Performance Objective**

Fell various problem trees using proper felling techniques, according to legislative requirements, to ensure safety of self and others.

#### **Guidelines for Performance Objective:**

- 1. Identify problem trees such as trees growing next to obstructions, tied together, multistemmed, uprooted, heavy leaners, trees leaning the wrong way, rotten core, etc.
- 2. Identify and discuss why it is a problem tree and any felling concerns and what the best strategy would be for dealing with it.
- 3. Demonstrate the appropriate technique, stopping at each step to explain what you're doing and why you're doing it that way:
  - Boring
  - The "1-2-3" technique
  - Using an angled backcut to cause a tree to turn as it falls
  - Using a wedge to push a tree over (and/or using a felling bar)
  - Wedging a small-diameter tree by making two half backcuts
- 4. If the cutter determines that he/she cannot fall the tree safely he/she may leave this tree standing.

#### **Component Checklist:**

- □ Identify and discuss why it is a problem tree, felling concerns and the best strategy for dealing with the tree
- □ Boring
- □ The "1-2-3" technique
- Using an angled backcut to cause a tree to turn as it falls
- □ Using a wedge to push a tree over (and/or using a felling bar)
- Wedging a small-diameter tree by making two half back cuts
- Cutter may leave a tree which cannot be felled safely

NOTE: All skill areas in the Modular Training Standards book will be continuously discussed during the training process.