

WOODLOT MANAGEMENT HOME STUDY

- a Brief Introduction to - CHAINSAW USE AND SAFETY

Safety Equipment and Clothing

Woodlot owners and casual users are now the biggest operators of chainsaws.

Consequently, there has been an increase in the number of chainsaw injuries. Most injuries result from the lack of knowledge, skill or judgement. Adequate training for both the casual and professional user is the key to safe use.

The Safety-Equipped Saw

Modern chainsaws are similar in basic design, some older ones lack essential safety features. Make sure your saw is equipped with the following:

1. **Throttle Control Lockout**
2. **Chain Brake**
3. **Chain Catcher**
4. **Anti-vibration System**
5. **Rear Hand Guard**
6. **Safety Chain**
7. **Safety Guide Bar**



Personal Protective Equipment

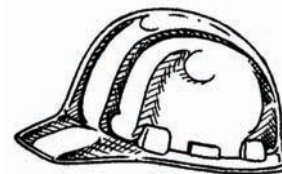
Select work clothes on the basis of safety, protection and comfort. Clothes should be comfortable but never loose to interfere with the safe use of the saw. The material should be light, strong, capable of keeping you dry and warm, allowing

excess heat and moisture to escape.

Many synthetic fabrics, cotton, and wool products are available but rarely will they meet all your requirements. It is necessary to mix and match clothing for best results. Using a chainsaw is hard work. Therefore, wear layers of clothing that can be removed one at a time to control your body heat. This is very important during colder months.

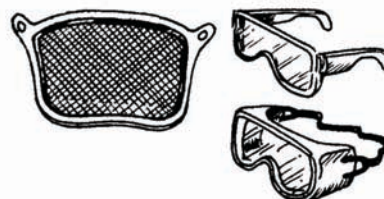
Head

A hard hat must be worn to protect your head from falling limbs, dead stubs or other hazards. It should be light, comfortable and a highly visible colour (e.g. orange, yellow, or bright red). A Canadian Standards Association (CSA) approved hard hat is required.



Eyes

Eye protection is essential to guard against injuries from branches and flying particles from the chain. The most common protective is a safety mesh visor made of nylon or metal. The visor will prevent eye damage and allow you to keep your work in full view. Safety goggles or safety glasses are acceptable alternatives. If you choose safety glasses, select the type with wrap-around lenses, or side shields.



Ears

The noise produced by a chainsaw is above 85 decibels and will cause permanent damage to your hearing. It is necessary to wear earmuffs or ear plugs to reduce the noise level reaching your ear. Earmuffs also protect the external ear. Clean the soft plastic pads and foam inserts periodically with soap and water. Always replace them before they become old and brittle.

Hands

Chainsaw gloves or mitts are worn to protect hands from injury and for warmth. Some forest workers wear gloves with added safety padding on the back of the left hand. Some prefer mittens with a separate index finger to operate the throttle. Gloves are not required safety equipment in Nova Scotia.

Legs

Since many chainsaw accidents cause injury to legs, you must wear protection. The two most common type of leg protection include:

- Safety pants: Provide the best protection



- Chaps: Cut-resistant, ballistic nylon leg pads that strap over work pants.



Feet

Wear boots with CSA Class A steel toe caps and non-slip soles. Many forest workers prefer boots which feature ballistic nylon protection in the front similar to safety pants or chaps. Work boots also protect the foot from painful crushing injuries.



REMEMBER a chainsaw is not a toy! It can seriously injure or even kill. **NEVER** use a saw without wearing all the personal protective clothing. **NEVER** use a saw that is not equipped with all safety features.

Safety Practices and Hazards

Transporting the Saw

Whenever you transport a chainsaw, it should be fitted with a chain guard for your own protection and to prevent damaging the chain. Apply the chain brake when carrying the saw.

Fueling

Check the manufacturer's manual that comes with your saw to make sure that you are using the proper oil/fuel mixture.

Checking the Saw

Get in the habit of checking your saw regularly before beginning to work. Check the following items:

- Throttle Control Lock-out
- Chain Brake
- Chain Catcher
- Anti-vibration System
- Rear Hand Guard

Also inspect:

- Chain tension
- Depth gauge settings
- Nuts and bolts for tightness

Selecting the Chain

For normal woodlot operations, there are several types of chains available. Always purchase a safety chain, but also consider the following when choosing a chain most suitable for your work:

1. Chain Pitch
2. Chain Gauge
3. Chain Length
4. Chain Tension

Sharpening

A sharp and properly maintained chain is essential for safe and efficient chainsaw performance. Always remember to remove oil and dirt from the chain teeth before sharpening. Secure the chain in the bar groove or other holding device so that the teeth won't move when you are filing.

Filing Angles

The important thing to remember is consistency. All top plate angles must be the same. The angle (usually either 25 or 30 degrees) is recommended by the manufacturer and is often marked right on the chain.

Guides

To avoid errors when sharpening, you may want to use a sharpening guide. Some are relatively inexpensive and surprisingly easy to use. They help to ensure the consistency needed for a smooth-cutting chain.

Sharpening Frequency

Ideally, the chain should be sharpened whenever it becomes dull. Many instruction manuals suggest that the teeth be sharpened lightly at each fill-up. How often will depend upon the species of the tree you're cutting, the season of the year, the forestry treatment, and the type of chain being used. It may be necessary to sharpen only once or twice daily.

Maintenance

Too often a good saw is ruined by not following detailed maintenance instructions found in the operator's manual. Neglecting the manual's advice will not only result in a shorter chainsaw life but will also cost you money and increase the chance of injury during saw operation. Maintenance checks can be done **daily, weekly, and monthly**. Obviously, certain items should be checked more often than other items.

First Aid

First Aid is a combination of knowledge, skills, and attitudes that must be learned and practiced **before**

emergencies arise. First Aid saves lives, relieves suffering and reduces the cost of accidents.

Responsibilities of a First Aider

When you have arrived at the site of an accident, your practical knowledge of First Aid and **common sense** will dictate what should be done first. Make full use of your senses to obtain maximum information: **listen, look, touch, and smell.**

Unless there is a danger of further injury or death to the casualty or yourself (for example, a tree is about to fall, or the casualty is lying in the path of moving vehicles or machinery) leave them where they are and find out what is wrong. Administer to the following **urgent needs** of the casualty:

1. **Breathing.** Ensure that the airway is clear. If the casualty is not breathing start artificial respiration immediately.
2. **Bleeding.** Control serious bleeding and elevate the injured part if no fracture is suspected.
3. **Unconsciousness.** If unconscious, the casualty must be placed in the recovery position. Maintain an open airway.

In case of serious injury, obtain medical help as quick as possible.

For More Information

Please refer to the full length version of, **Home Study Module 6: Chainsaw Use and Safety.** This module, along with others in the Home Study series, are available free from:

**Stewardship and Outreach Section
Department of Natural Resources**

P.O. Box 698, Halifax NS, B3J 2T9

Phone: (902) 424-5444

Toll free: 1-866-226-7577

Fax: (902) 424-7735

e-mail: woodlot@gov.ns.ca

web: www.gov.ns.ca/natr/extension/