

ASWP 07 R0

Arborist Hand and Power Tools



Revision History

Version	Revision Date	Brief Description of Revisions
R0	February 2016	Document has been updated to new format.

ARBORIST SAFE WORK PRACTICES DISCLAIMER

The contents of the **Arborist** Safe Work Practices (ASWP), including all advice, recommendations, and procedures are provided as a service by Workplace Safety & Prevention Services (formerly known as the Farm Safety Association of Ontario). No representation of any kind is made to any person whatsoever with regard to accuracy, completeness or sufficiency of the material. Any and all use of these practices, or anything found herein, is solely and entirely at the user's risk.

Workplace Safety & Prevention Services wishes to express its appreciation to those who have assisted in the preparation of the **Arborist SafeWorkPractices** guide.

Copyright © Workplace Safety & Prevention Services, 2011

Contents

1.0 Introduction

2.0 Equipment Used

2.1 Axes, Brush Hooks and Other Chopping Tools

2.2 Pole Pruner, Pole Saws, Pneumatic Tools and Electrical Trimmers

2.3 Log Handling Devices

2.4 Wedges, Chisels and Gouges

2.5 Hammers, Mauls, Shovels and Sledges

2.6 Load Controlling Devices and Components

3.0 Hazards

4.0 Legislation / Safe Work Practices

5.0 Mandatory Information

6.0 Work Practices

6.1 Axes, Brush Hooks and Other Chopping Tools

6.2 Pole Pruner, Pole Saws, Pneumatic Tools and Electrical Trimmers

6.3 Log Handling Devices

6.4 Wedges, Chisels and Gouges

6.5 Hammers, Mauls, Shovels and Sledges

6.6 Load Controlling Devices and Components

6.7 Telescopic Power Pole Saws. Power Pack Saws

7.0 Ladders

1.0 Introduction

The purpose of this document is to outline the inspection and maintenance requirements for Arborist Hand and Power Tools.

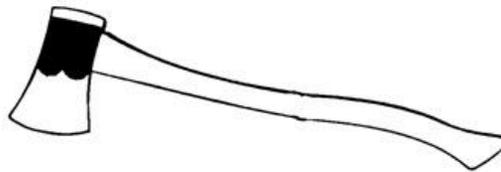
2.0 Equipment Used

The following outlines some of the tools used in arboriculture.

2.1 Axes, Brush Hooks and Other Chopping Tools

- Axes
- Knives
- Loppers
- Picks
- Secateurs

Figure 1



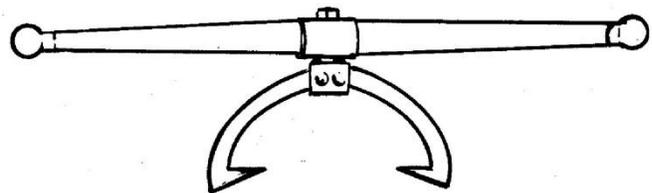
2.2 Pole Pruners, Pole Saws, Pneumatic Tools and Electrical Trimmers

- Back Pack Pole Pruner, Saws and Blowers
- Brush Saws
- Compressors
- Extension Cords
- Telescopic Power Pole Saw
- Hand Saw
- Hydraulic Pole Saws and Pruners
- Pole Pruners
- Pole Saws
- Power Pack Saws

2.3 Log Handling Devices

- Cant Dogs
- Cant Hooks
- Carrying Bars
- Felling Levers
- Peaveys tongs

Figure 2



2.4 Wedges, Chisels and Gouges

- Augers and bits
- Chisels
- Drills
- Wedges

2.5 Hammers, Mauls, Shovels and Sledges

- Brooms
- Mallets
- Rakes
- Shovels / Spades
- Sledge Hammers

2.6 Load Controlling Devices and Components

- Carabiners
- Come-A-Long
- Pulleys
- Slings
- Chainfalls
- Lowering Devices
- Rope Pullers
- Tackle Blocks

3.0 Hazards

The following hazards have been identified to aid in establishing and maintaining a safe work environment when working with arborist's hand and power tools:

Climatic Conditions

Ergonomics

Note: The above list of hazards is not a complete list and a thorough job plan should be completed to identify existing hazards found at the work site.

4.0 Legislation / Safe Work Practices

The following information has been provided listing relevant arborist safe work practices and legislation requirements:

- ASWP01 General Legislation
- ASWP02 Work in a Safe Environment
- ASWP02 Protect Self and Others
- ASWP02 Arborist Job Planning

Legislation	RRO / RSO	Section Referenced
Industrial	851 / 90	41, 42, 43, 45, 51, 61,139
Construction	213 / 91	78, 79, 80, 81, 93,95,109, 113, 172, 173, 174, 176, 177, 179, 181, 195,

5.0 Mandatory Information / Work Practices

The following are the general mandatory requirements for an arborist when utilizing power or hand tools. In addition to these requirements, the work practice contains specific requirements that must also be followed.

- Inspect all equipment tools daily / before use. Inspect for loose handles, cracks, defects, loose bolts, sharpness etc.
- All tools and equipment use, inspection and maintenance shall adhere to the manufacturer's instructions where applicable
- All appropriate Limits of Approach to electrical apparatus shall be maintained
- Guards and sheaths should be used to protect sharpened edges of knives, blades or chains, etc.
- In electrical environment only tools designed, tested and maintained for electrical environment shall be used
- Gasoline, oil and gas powered equipment shall be stored separately from other personal tools
- Rigging equipment must be labeled with the appropriated Working Load Limit (WLL) or Safe Working Load (SWL)
- Power cords for electrical tools shall be monitored to ensure they are not cut or fall into water

6.0 Work Practices

The following information will provide general information that is required to conform to the use of hand and power tools.

- The correct hand tool(s) and equipment shall be selected for the job
- Hand tools and equipment that have been made unsafe by damage or defect shall not be used
- Arborists and other workers shall maintain a safe working distance from other arborists and workers when using hand tools and equipment
- When ascending a tree (Refer to ASWP03 Climbing Trees) arborist's shall not carry hand tools and equipment in their hands unless they are tools that are used to assist them in their climbing
- Tools other than ropes, or throw lines shall not be thrown into a tree, out of a tree or from arborist to arborist while in a tree
- Arborist climbing lines or hand lines should only be used for raising and lowering hand tools and equipment
- Arborists should raise or lower hand tools and equipment in a manner such that the cutting edge will not contact the climbing line or hand line
- Hand tools and equipment shall be properly stored or placed in plain sight out of the immediate work area when not in use

6.1 Axes, Brush Hooks and other Chopping Tools

- Chopping tools that have loose or cracked heads or splintered handles shall not be used. Chopping tools should not be used while working aloft.
- Chopping tools shall be swung away from the feet, legs, and body, using the minimum forces practical for control.
- Chopping tools shall not be used as wedges or used to drive metal wedges.
- Blade eyes shall be tight fitting and wedged to prevent slippage down the handle.
- A secure grip, firm footing and clearance of overhead hazards shall be maintained when swinging chopping tools.

6.2 Pole Pruners, Pole Saws, Pneumatic Tools and Electrical Trimmers

- Manual pole pruners, pole saws, and other similar tools with poles made of metal or other conductive material shall not be used in operations where electrical hazards exist.
- Structurally damaged poles shall be removed from service.
- When tools are not in use they shall not be:
 - Left laying on ground
 - Stored improperly or hung on a limb of insufficient strength to support the weight of the tool
- Extension cords must be monitored to ensure they are not cut.
- Inspect extension cords for cuts, frayed ends, and loose connections.

6.3 Log Handling Devices

- Cant hooks should be firmly set before applying force.
- Tools with cracked, splintered, or weakened handles should not be used.
- Arborists and other workers shall be warned and in the clear before logs are moved. Points of cant hooks should be maintained to manufacturer's specifications.
- Arborist and other workers shall stand to the rear and uphill when rolling logs.

6.4 Wedges, Chisels and Gouges

- Wedges, chisels, and gouges shall be inspected for cracks and flaws before use.
- Wedges and chisels shall be properly pointed and tempered.
- Tools with mushroomed heads shall not be used.
- Eye protection shall be used during impact operations.
- Only wood, plastic, or soft-metal wedges shall be used to stop binding while operating chain saws.
- Wood handle chisels should be protected with a ferrule on the striking end.

6.5 Hammers, Mauls, Shovels and Sledges

- Wood, rubber or high-impact plastic mauls, sledges or hammers **should** be used when striking wood handle chisels or gouges.

6.6 Load Controlling Devices and Components

- Load controlling devices and components shall be inspected according to manufacturer's recommendations immediately before use and removed from service if found to be defective.
- The components of load controlling systems shall be compatible and suitable for the application and load.
- Slings shall have working load information labels attached.

6.7 Telescopic Power Pole Saws, Power Pack Saws

- The saw and that which you are cutting shall never be used within Limits of Approach.
- Workers while working aloft should not use the tool.

7.0 Ladders

- Ladders made of metal or other conductive material shall not be used where electrical hazards exist.
- Ladders shall conform to the appropriate CSA standard.
- Ensure that the appropriate grade of ladder is used.
- All ladders shall be inspected before use.
- Cleats, metal points, skid-resistant feet, lashing or other effective means of securing the ladder shall be used when there is danger of slipping.
- Ladders shall be supported while in storage to prevent sagging.

Note: Except when on mobile equipment, ladders **should** be stored under suitable cover, protected from the weather, and kept in a dry location away from excessive heat.

- Ladders shall not be used as bridges or inclined planes to **load** or handle logs or other material.
- The appropriate 4 to 1 ratio of vertical height to distance from base must be maintained (Figure 3).

Figure 3

