

Montague Wood Bank Volunteer Task Information

Overview: The volunteer task information form provides platform to develop a clear understanding between volunteers and a wood bank safety coordinator of potential health and safety conflicts which are likely to be encountered given the nature firewood processing work.

The information form and attachments should be provided to each volunteer. The signed copy should be retained in the wood bank records.

Volunteer:		
Safety Coordinator:		
Task:	Splitting Firewood with Hand Tools	
Location:	Processing/Storage Yard	
Description of Task:	Splitting firewood is necessary to properly dry and burn firewood in a wood stove. Volunteers will gather bucked wood rounds, split wedges for further processing, and/or split rounds into appropriate sized firewood before placing in a wheel barrow or pile.	
Overview of Hazards:	Outdoor work, uneven walking surfaces with obstructions, manual lifting, striking tools against wood, using a maul and a metal wedge, loud noises, other people using tools and equipment.	
Personal Protective Equipment:	Gloves, Foot Protection, Eye Protection, Hearing Protection (for wedge and maul work)	
Additional Trainings to be Completed: (See Attached)		
	Volunteer Initials	Coordinator Initials
1. Hand Splitting Tool Use and Care	1.	1.
2. Weight Estimation and Safe Lifting Techniques	2.	2.
3. Firewood Split Sizes	3.	3.
4. Working around Power and Heavy Equipment	4.	4.
Volunteer Signature:		
Date:		
Safety Coordinator Signature:		
Date:		

See Page 2 and 3 for Hazard and Risk Management Details

Hazards for Splitting Firewood with Hand Tools

General Hazard Descriptions:

Weather: Task is conducted outside. Volunteer should be familiar with outdoor hazards such as heat, cold, insect bites/stings, snow, and rain.

Slips, Trips, and Falls: Volunteers will be exposed to uneven walking surfaces, wood rounds in work area, and piles of firewood.

Loud noises: Striking wood with tools may produce loud noises. Striking wedges with mauls will produce loud noises. Power log splitters and chainsaws may be operated by others in the general area.

Manual Lifting: Volunteers will be exposed to wood rounds exceeding 50 lbs. in weight. Volunteer may need to lift a round under 50 lbs. in weight from grade to a splitting block with a height not more than 2'.

Cuts/Punctures: Volunteers will be handling sharp tools. Swinging tools have the potential to contact the individual. Firewood has rough surfaces and splinters which may become lodged in a hand.

Crushing/Pinching: Wood rounds may roll or fall while volunteer is moving them around the worksite hitting their foot, hand, or other part of body. A finger or hand may become pinched between two pieces of partially split wood which the individual is working on. Split firewood may slip out of volunteer's hand or fall off a pile/wheel barrow hitting their foot, hand, or other part of body.

Hand Tools: Volunteer will be working sharp hand tools to split firewood such as axes, mauls, and steel wedges.

Power tools: Volunteer may be working in an area with others operating powered log splitters and chain saws.

Heavy Equipment: Volunteer may be working in an area where heavy equipment may be operating including equipment such as motor vehicles, front end loaders, backhoes, and skidsteers

Notes:

Risk Management for Transporting and Stacking Split Firewood

Risk Management Actions

Physical/ Mental Fitness for the Task: Volunteers should arrive well rested, mentally focused, and able to complete the task as described. Volunteers should also take frequent breaks and vary body movements by alternating between moving wood rounds, swinging tools, and piling wood.

Communication: Volunteer is responsible for establishing communication with others in the area prior to starting work to maintain a safe work distance. Volunteers should feel comfortable communicating with one another and the wood bank coordinator.

Weather: Volunteer should be dressed appropriately for outdoor work and bring items that they need to be comfortable conducting manual labor. Layering of clothing is preferable to adjust body temperature.

Slips, Trips, and Falls: Volunteer will make an effort to keep work area clear of trip hazards such as wood rounds and firewood pieces. Footwear should have a non-slip tread.

Cuts/Punctures: Volunteers will develop appropriate splitting technique to minimize the potential for an under strike of splitting tool. Volunteers will also wear leather or rubberized work gloves when handling wood and tool faces to protect against cuts and splinters.

Manual Lifting: Volunteers will use appropriate lifting techniques referenced in the “Weight Estimation and Safe Lifting Techniques (part 2)” module.

Crushing/Pinching: Volunteers will wear appropriate footwear with “safety toes” or an overshoe guard to protect against rolling wood rounds or falling firewood. Volunteers should never place a hand or finger in a partially split piece of wood as it may close unexpectedly and pinch them.

Hand Tools: Volunteer is responsible for the safe operation of their tools. Volunteer must inspect tools to ensure that they are in working order prior to use. Eye protection and foot protection is required for splitting wood. Hearing protection is required for splitting with a maul and wedge. Refer to the “Hand Splitting Tool Use and Care” training for additional information.

Power tools: Volunteers may be working in proximity with other individuals operating power tools such as chainsaws and log splitters. Volunteers must maintain a safe distance from those operating power tools. Communication between both the volunteer and the tool operator must be established prior to entering the tool work area. While not directly within the tool work area it still may be advisable to wear hearing protection given loud noise produced from power tools.

Heavy Equipment: Before starting work in an area with equipment present notify an equipment operator of your intent to work in the area. Stay clear of the area when equipment is in use and locate yourself in an area where the operator can see you. Never stand behind or under equipment.

Training Syllabus

1. Hand Splitting Tool Use and Care

- Hand splitting tools can be an effective means of firewood processing and provide excellent physical exercise. Volunteers will be introduced to the following hand tools, instructed in their proper use by the safety officer, and demonstrate proper use.
 - Splitting axe
 1. Clear working area/ PPE
 2. Handle/Head check
 3. Sharp tools are safe tools
 - a. When to notify that a tool is dull or how to sharpen tools
 4. Using a splitting block
 5. Working with the grain of the wood
 - Splitting maul
 1. Clear working area/ PPE
 2. Handle/Head check
 3. Sharp tools are safe tools
 - a. When to notify that a tool is dull or how to sharpen tools
 4. Working with the grain of the wood
 5. Working around a big round
 - Steel wedges
 1. When to use and wedge care
 2. Monitoring the mushrooming of the wedge
 3. Thickness of wedges

2. Weight Estimation and Safe Lifting Techniques

- Wood is deceptively heavy when it is green to do the excess water stored in wood. The Safety coordinator will show volunteers a wood round that weights approximately 50 lbs. (16" x dia. 11") to familiarize them with estimating their ability to manually lift pieces of wood.
 - What to do when wood is too heavy. Roll to a lifting device or break up in pieces.
 1. Rolling to a lifting device passes wood off from hand splitting to power splitting.
 2. Demonstrate and observe volunteer breaking large rounds with sledge/maul and wedges.
- Demonstrate lifting wood from the ground using bent knees and a straight back.
- Demonstrate usage of timber tongs

3. Firewood Splitting Sizes

- Firewood should be approximately fit through at 6" diameter hole. This size improves wood drying for safety and energy efficiency.

4. Working around Power and Heavy Equipment

- Safety Coordinator will demonstrate maintaining a safe distance from people operating power equipment and how to approach power equipment operators. Volunteers should also be familiar with where to find PPE to protect their hearing including ear muffs and ear plugs.