

Messiah University
Tree Trimming and Removal Safety Policy and Procedure
December 2023

Policy: It is the policy of Messiah University to protect all employees whose job responsibilities include trimming and removing trees. Also, to set chainsaw operation safety standards that prevents employees from being injured by the unexpected.

Objectives: To ensure that all staff trimming and removing trees are up to date on the safest techniques and equipment on an annual basis. Also, prevent any type of injury that could occur while trimming and/or removing trees.

Equipment: Leather gloves, safety glasses, hard hat, hearing protection, chainsaw chaps

Procedure:

Safety Procedures:

Head Protection

- Head protection, in accordance with ANSI Z89.1 (hard hats) shall be worn during all tree work where there is a potential for injury from falling objects.

Also, shall be worn by all employees working in the area.

Hearing Protection

- The operation of certain power tools and machines over a specified period of time will require the employee to be protected. For example, gas powered chainsaws and pole saws require hearing protection. See Messiah University Noise Exposure Policy.

Eye Protection

- Eye protection, in accordance with ANSI Z87.1 shall be worn during all phases of tree maintenance. A minimum of impact resistant safety glasses with side shields and face visor shall be worn at all times to protect against limbs, sticks, splinters, wood chips, saw dust and other flying objects. Also, safety glasses/face visor shall be worn by all employees working in the area.

Hand Protection

- Leather gloves shall be worn at all times to protect against cuts, punctures, heat and splinters.

Body Protection

- Loose fitting clothing and jewelry should not be worn when performing tree work. Loose items can become entangled quickly in saws or other equipment and can pull the employee into the saw blade or engine. Limbs can also snag onto loose items and knock the employee off balance.
- Long pants and chainsaw resistant leg protection, such as ballistic nylon chaps, shall be worn when an employee is operating a chainsaw or hedge clippers on the ground. Employees who are engaged in operating a chainsaw in an aerial bucket are not required to wear chainsaw resistant pants if it interferes with the employee's mobility and safety.

Fall Protection

- When using the bucket truck, appropriate safety harnesses should be used.
- Trees should not be climbed for trimming.

Safety in Numbers Protection

- No one is to do tree work alone. There must be a minimum of 2 employees during use of a chainsaw and/or the bucket truck for safety.

Action Procedures:

Tree Trimming (using the bucket truck)

- Communications shall be established between the tree worker aloft and the workers on the ground before cutting and dropping limbs. The command "stand clear" from aloft and "all clear" from the ground are terms that may be used for this purpose. The ground workers returning to the work area shall be acknowledged by tree workers aloft.
- All cut branches shall be removed from trees before completion of work.
- Pole saws or chainsaws shall be securely positioned to prevent dislodgement and shall be removed when a tree worker leaves a tree.
- Tree workers in the bucket should be above or to the side of the limb being lowered.
- Only properly trained employees are permitted to operate the bucket truck.
- The bucket truck shall not be moved with an employee in the bucket.
- If the bucket truck is being used, it must be in compliance with the policy for aerial lifts.

Tree Trimming From the Ground

- Branches and pole saw should never be directly overhead.
- All saw cuts with a pole saw or pole pruners should be at a 45° angle or less away from the body.

Tree Felling and Removal

The following procedures shall be used when felling and removing trees:

- A site assessment shall be done before cutting and removing any tree. The Crew Leader and Grounds Manager shall consider the following factors in their plan to safely remove the tree
 - a. Surrounding area including other trees
 - b. Species, height, and shape of tree
 - c. Lean of tree
 - d. Loose limb and other overhead materials
 - e. Decayed or weak spots
 - f. Wind force and direction
 - g. Fall location relative to persons, property, and electrical conductors
 - h. Be aware of overhead electric lines at all times.
- A job briefing shall be held with all crew members before commencing work.
- Workers shall be positioned and their duties organized so that the actions of one worker will not create a hazard for any other worker.
- A planned escape route for all workers shall be prepared before cutting any standing tree or trunk, the preferable escape route is 45° on either side of a line drawn opposite the intended direction of the fall. The chainsaw operator shall use this path for egress once the cut has been completed.
- Workers not directly involved shall be clear of the work area.
- Workers returning to the work area shall not enter until the chain saw operator has acknowledged that it is safe to do so.

- All limbs shall be trimmed to a height and width sufficient to allow the tree to fall clear of any wires and other objects in the vicinity.
- Wedges, block and tackle, rope, wire cable (except where an electrical hazard exists) or other appropriate devices shall be used when there is a danger that the tree or trees being removed may fall in the wrong direction or damage property.
- Notches shall be used on all trees and trunks over 5 inches in diameter at breast height.
- Notches and back cuts shall be made at a height above the highest ground level to enable chain saw operators to safely begin the cut, control the tree or trunk and have freedom of movement for escape.
- Notch depth should not exceed one-third of the diameter of the tree.
- The two cuts that form the notch shall not cross at the point where they meet.
- Before commencing the back cut there shall be a command such as "stand clear" from the tree care worker operating the chainsaw and a response such as "all clear" from the workers supporting the removal operation.
- Once the back cut has been completed, the chain saw operator shall immediately move a safe distance away from the tree or trunk on the planned escape route.
- Visual contact should be maintained with the tree or trunk until it is on the ground.
- If tree root removal is required, a PA1 call must be completed first.

Limbing and Bucking

- Chain saws should be operated away from the vicinity of the legs and feet. Employ natural barriers where possible, such as limbs between the saw and the body. Whenever possible, cut on the opposite side of the log from you.
- Maintain sight of the tip of the saw to prevent kickback.
- Do not limb above your shoulders.
- The preferred working position is on the uphill side of the work.
- When necessary to prevent rolling, logs shall be blocked with wood or other suitable material.
- Trees, segments of trees, limbs or saplings under stress or tension due to pressure or weight of another object are hazardous and shall be removed by mechanical means such as pulling down with a cable. Trees that have become lodged in adjacent trees are especially dangerous and shall be removed by mechanical means. NEVER walk underneath the lodged tree.
- Wedges should be used as necessary to prevent binding of the guide bar or chain when bucking up trunks of trees.

Note - The signed copy of this procedure is filed in the Facility Service Department. By signing this policy you have agreed to enforce the contents, share with your staff and adhere to standards.

Scott Zeigler, Form
Creator Signature

Electronically signed by Scott Zeigler on 11/13/2023 1:56:24 PM

Vice President for
Operations Signature

Electronically signed by Kathie Shafer on 11/13/2023 2:48:05 PM

Director of Facility
Services Signature

Electronically signed by Bradley Markley on 11/13/2023 2:31:03 PM

Assistant Director of
Buildings and Grounds
Signature

Electronically signed by Mark Graybill on 11/13/2023 2:09:50 PM

Assistant Director,
Physical Plant Signature

Electronically signed by Brian Miller on 11/20/2023 8:31:42 AM

Health & Wellness
Coordinator Signature

Electronically signed by Jennifer Smithmyer on 11/14/2023 11:58:01 AM