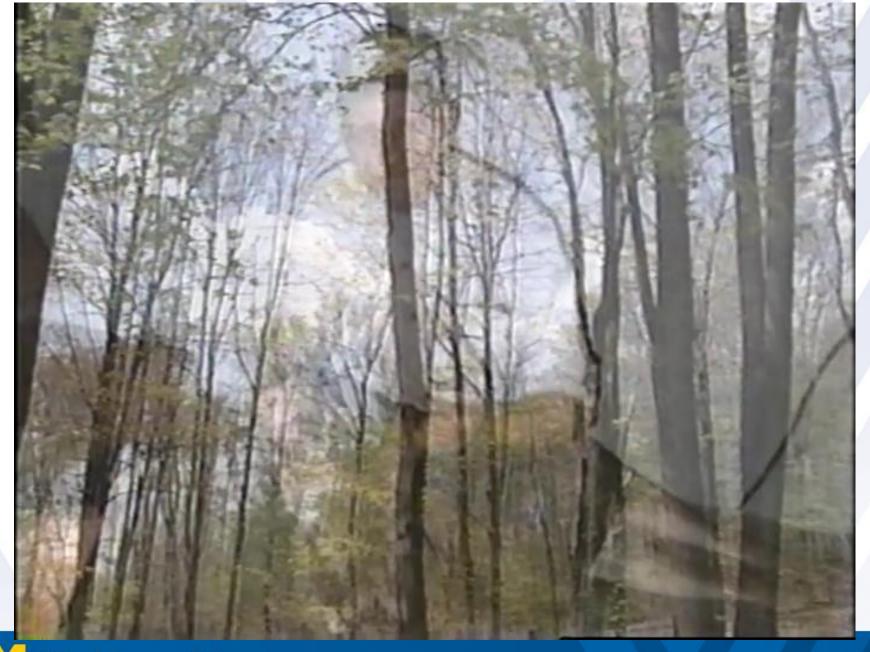
Welcome



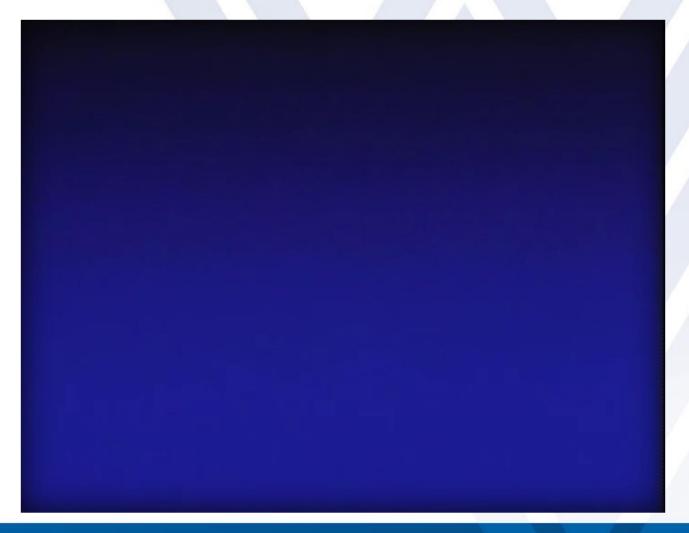
Why are you here?

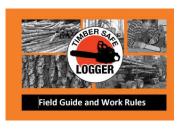


West Virginia University.

EXTENSION SERVICE

Section 1: Personal Protective Equipment





Personal Protective Equipment (PPE) Work Rules

- Chain saw operators- Logger hard hat with muffs and face screen, chaps, cut resistant boots and brightly colored shirt or vest.
- Equipment operators- Hard hat, eye and hearing protection with open cabs, sturdy leather safety toed boots, puncture resistant gloves when handling wire rope, and brightly colored shirt or vest if doing any ground work.
- Ground support- Hard hat, eye protection, sturdy leather safety toed boots, puncher resistant gloves when handling wire rope, brightly colored shirt or vest and hearing protection when near noisy operations.

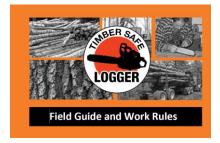
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CHAIN SAWS

How do people get cut?

Chain Saw Operation Work Rules

- 1. Saws must be inspected at the beginning of each shift.
- 2. All safety features must be working properly.
- 3. Saws must be adjusted and used according to the manufacturer.
- 4. Refueling must be done at least 10 feet from ignition sources.
- 5. Starting must be done at least 10 feet from your fuel sources.
- 6. Starting must be done with chain brake engaged.
- 7. Start firmly supported on the ground or using crotch start method.
- 8. Cutting must be done with both hands on the saw and secure footing.
- 9. Your cutting area and retreat path must be kept clear.
- 10. Do not cut overhead.
- 11. You must engage the chain brake or shut off the saw when moving.



Section 3: Manual Felling



Safe Felling Work Rules



- Danger trees, lodged trees, snags must be felled or removed with equipment before felling starts.
- If not removed, they must be marked and no work performed within two tree lengths of the danger tree.
- 3. Look over the position, condition, and lean of the tree.
- 4. Decide if the situation is hazardous or unfamiliar.
- 5. If so, talk to your supervisor about it.
- 6. Establish a clear fall path and landing zone.
- 7. Plan and clear an escape path.
- **8.** Use controlled directional felling.
- 9. Notch must be at least 70 degrees.
- 10. Backcut must leave a sufficient hinge (guideline is 1 inch per 10 inches of dbh).
- 11. No by-passes in the notch.
- 12. Stay at least two tree lengths from other workers and machines.

LIMBING and BUCKING

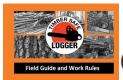
How do people get hurt?

Limbing and Bucking Work Rules

LOGGER SANDERS FIEld Guide and Work Rules

- 1. No overhead hazards are permitted.
- 2. Spring poles must be mechanically released or released by shaving.
- 3. Always limb and buck on the uphill side of the log.
- 4. If you think the log will move or roll, chock the log or plan to use cuts such as the top lock or tongue and groove.
- 5. If you are bucking a wind-thrown tree, chock the root wad to prevent it from hitting you.

SKIDDING What can go wrong?



Cable Skidding and Grapple Operations Work Rules

- 1. Operators must wear seat belts
- 2. Maintain a "two tree length" safety zone for other workers and equipment.
- 3. Chokers must be hooked/unhooked from end of the log on the uphill side.
- 4. Workers on foot must have clear view of the operators.
- 5. Operators must wait for the signal before moving the logs.
- 6. Winching must be done within the stability limits of the machine.
- 7. Skidder blade must be down during initial winch.
- 8. Winch cable must be within 45 degrees of machine centerline.
- 9. Yarded trees must be placed in a location that does not cause a hazard.



LOADING

What can get you in trouble?

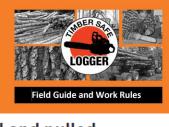
Loading and Transporting Work Rules

- Workers maintain safe distance from log inventory.
- 2. No unstable log piles.
- 3. No booms or loads above ground workers.
- 4. Loader boom grounded when not in use.
- 5. Only authorized workers are allowed in the area or within the danger zone.
- 6. There must be a working clearance between the truck and logs being loaded.
- Serviceable metal standards and cab racks on trucks.
- 8. Driver must be out of the cab.
- 9. Logs must be loaded to prevent slippage.
- 10. The height of the logs must be kept well below the truck's stanchions.
- 11. No higher than 1/2 the diameter of the top-most logs over stanchions.
- 12. Logs must be secured immediately after loading and before moving the truck.
- 13. Tie downs must be left in place until unloading lines or stakes are put in place.
- 14. Tie downs must be released from the side on which the unloading machine operates.



Section 7: Machines and Vehicles





- 1. Machines must be inspected at the beginning of each shift.
- Machines with defects that affect safe operation must be tagged and pulled from service until repaired.
- 3. Manufacturer's instructions must be located on site and must be followed.
- 4. Machines must be operated only by designated, trained and licensed workers.
- 5. Seat belts must be used during operation.
- 6. Steps, handholds and 3-points of contact must be maintained and used.
- 7. Hitching a ride on any mobile equipment is not allowed.
- 8. Equipment must have its own fully charged portable and properly mounted fire extinguisher.
- 9. Machines must be operated to maintain "two tree length" safety zone for other workers.
- 10. Before leaving a machine, the operator must place the transmission in park, set the parking brake and ground each moving part.
- Cabs must be free of flammable liquids, unsecured tools, and other loose items.

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Section 8: Chemicals

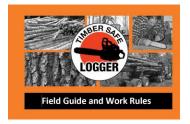




Chemical Safety Work Rules

- 1. Your supervisor will train you on the hazards associated with the chemicals you use.
- 2. Supervisors will have a Safety Data Sheet (SDS) binder for you to review chemical hazards.
- 3. Read the label and SDS before using a chemical.
- 4. Check the health hazards section for routes of entry and signs of over exposure.
- 5. Check the protective measures section for proper PPE.
- 6. Check fire and explosion section.
- 7. Follow warning labels and manufacturer instructions.
- 8. All chemicals must be in properly labeled containers.
- 9. No milk jugs, laundry jugs or improper containers.

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Signaling Work Rules

- 1. Worker-to-worker contact must always be maintained.
- 2. Whenever noise prevents voice communication, other methods such as; hand signals or radios must be used.
- 3. Whenever distance or terrain prevents voice communication, other methods such as; radios or whistles must be sued.
- 4. Engine and chain saw noise CANNOT be used to maintain contact.

Section 10: Feller Buncher



Feller Buncher Work Rules



- Inspect the unit at least twice a day.
- 2. Only trained operators are permitted to operate.
- 3. Operate and maintained according to the manufacturer.
- 4. All guards, screens, and shields must be present.
- 5. Do not operate within 300 feet of other equipment or personnel.
- 6. Work up and down slopes.
- Saw-head must be stumped/stopped prior to returning to deck or servicing.
- 8. Seat belt must be worn by the operator.

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Section 11: First Aid/Emergencies



Emergency Response Work Rules



- All accidents, no matter how slight, must be reported to your supervisor immediately.
- 2. Your supervisor will communicate each job site's emergency action plan.
- 3. All cutting sites, landings and worker transport vehicles must have first aid kits.
- 4. You must have a current First Aid and CPR training completion certificate.
- 5. Don't move a person with a serious injury unless the situation further threatens their life.
- 6. A site-wide communication system and a reliable way of contacting EMS on the work site must be established.
- 7. If using a cell phone as part of the system, keep track of areas of reception.

You didn't learn how the be the professional logger you are over night.

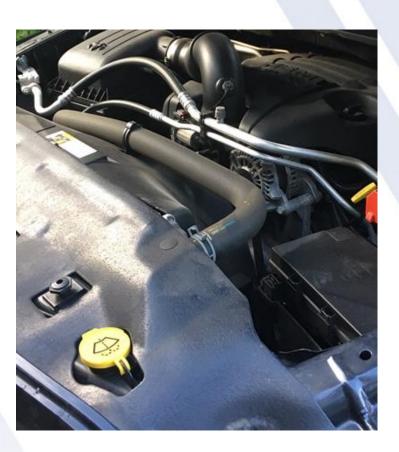
You won't wake up tomorrow and know all there is to know about site safety management either.

Timber-Safe Program



- Timber Safe is based on the idea that we learn most by doing
- That learning never stops and we keep getting better
- That team work is important
- It's about being part of something that helps ensure everyone goes home safe and sound

What is a System?



- A group of THINGS that work together to accomplish a goal.
- What is the goal?
- What happens if one component fails?

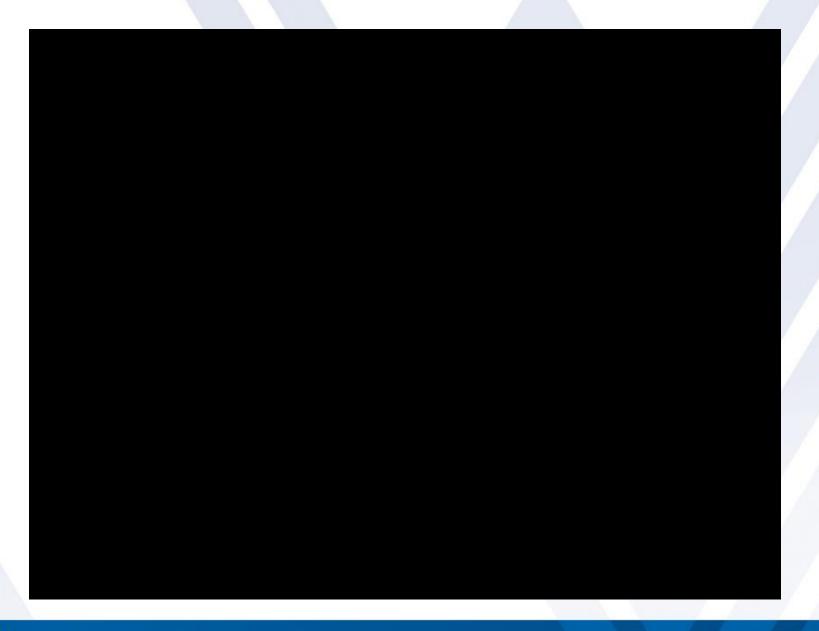
Safety is a System Too!



- A group of PEOPLE that work together to accomplish a goal.
- What is the goal?
- What happens if one component fails?

Safety and Health System Model





Welcome to Timber Safe!



The success of this logging site safety management program hinges on everyone doing their part. As a Timber Safe worker you should:

- Comply with the work rules within this field guide.
- 2. Bring this booklet to all safety meetings, speak-up and participate.
- 3. Ask for assistance and supervision as needed.
- 4. Use and maintain your PPE.
- 5. Operate/maintain tools and equipment according to the manufacturer.
- 6. Report unsafe conditions, near misses, and injuries.
- 7. Correct unsafe conditions within your work area if authorized to.
- Don't take unnecessary risks!

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Let's take a look at your company's Timber Safe program and how the pieces work together to help keep everyone safe