

# Lessons From Losses

## Feller buncher tips over from operator misjudgment

**T**o help TPA members avoid accidents resulting in injury or damage to property, the Timber Bulletin, in association with Lumbermen's Underwriting Alliance, will publish details of actual incidents and what can be done to avoid such occurrences in the future. By sharing this information, TPA and LUA hope to make our industry as safe as possible.

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**Background:** The feller-buncher hot saw unit in this incident had approximately 10,000 operating hours. Maintenance and housekeeping would be rated as fair. Most maintenance is completed in-house with the large-scale maintenance completed by a local heavy equipment shop. Major maintenance additions in the last year include a new engine in the last month, and new rails/sprockets in the under carriage during spring break-up. This equipment was last power-washed within the last month during the installation of the engine. Daily cleaning in hot areas



The feller-buncher tipped after running up on a stump while in a hardwood stand.

is completed during the morning pre-operation check. During the warm weather season the pre-plan is to power-wash every two to four weeks and/or as needed. Also, this operation utilizes compressed air to clean weekly and/or as needed.



The feller-buncher was idle for 14 days while being repaired as a result of this incident.

The temperature at the time of the incident (mid-afternoon on August 22nd of this year) was approximately 80 degrees. The skies were cloudy, and light rain did occur that day. This situation occurred in the woods approximately eight miles from the nearest town. This logging location is approximately three hours from this operation's home base.

**Operators:** The operator of this equipment is considered fully trained in operation of logging equipment with most of his experience coming as a feller-buncher operator. For the last 12 years this individual has operated both rubber tire and track feller-bunchers. Also, this individual has worked for this company for approximately 10 months and operated this particular equipment for the last three months.

**Incident and/or Injury:** The operator was working in a hardwood stand of timber, felling a large maple tree on mostly level terrain. As the operator was felling this tree, he was swinging to lay the

tree in bunches and was backing up at the same time to position himself to the already bunched wood. The equipment ran up on a stump while the swing was sideways to the track system and the equipment started to tip. It twisted, putting the operator completely out of position, and causing the equipment to lie on the engine side. No personal injury occurred and the machine was shut down.

That same day, the machine was up-righted and the necessary repairs were completed on site. The repairs/part replacement involved the radiator/oil cooler system, engine compartment shielding, etc. and was down for repairs over 14 days. Besides the damage that occurred to the machine, valuable down-time (loss of machine) and other indirect costs add up quickly!

**Unsafe act and/or condition:** It is believed that the direct cause of this incident is operator error and insufficient training in the operation limits of this equipment. Some contributing factors may have been the wet/damp terrain, rocky terrain, stumps cut too high, etc. The following suggestions can help prevent problems in this type of situations when working with mobile equipment.

**Preventative Measures:**

1. Complete initial employee training and follow-up for proper operation, service, emergency response etc. A good follow-up may include – but not be limited to – items such as the review of all equipment, the limits of all equipment, work procedures, etc. Cross-training all employees is also very beneficial and a very positive way to complete weekly tool box safety meetings.
2. Complete refresher training (safety meetings) at the start of each logging site to enforce the unique hazard situations of each logging site. All employees need to be included.
3. Always shut down the electrical disconnect (master switch) on your mobile equipment in an emergency situation. Refresher training for all employees needs to be reviewed regularly.
4. Train employees on proper use of fire extinguishers in an

emergency situation. The benefit of fire extinguisher port holes should be considered on all mobile equipment. The panic factor is what you're preparing for in an emergency situation.

5. Install an on-board fixed self-suppression system on all mobile equipment. Additional protection is always very beneficial in a fire

emergency situation. Always follow the owner's maintenance manual for service and inspection of these systems. This is a very important factor in the performance of this protection.

The enclosed two pictures involve this mobile equipment at the time of occurrence and after the fact during the repair.