PLEASE PASS THIS ON TO PEOPLE AND ORGANIZATIONS IN BC'S FOREST INDUSTRY

June 2020

Wildfire Hazards: Danger Trees

This series of safety alerts for May, June and July is intended for all workers, both forestry workers and fire crews, responding to fires and highlights hazards that exist in a wildfire environment.

A danger tree is any tree that presents a hazard to workers due to lean, physical damage, overhead condition, deterioration or any combination of these factors. A tree does not have to be dead to be a danger tree and a dead tree is not necessarily dangerous.

The key to working safely around danger trees is to conduct a thorough risk assessment on any areas where workers are to be working. During wildfires this assessment includes both burnt and unburnt areas where crews would be working. All danger tree risk assessments must start with



an overall stand assessment of unburnt forest to identify any characteristics that would increase the risk of dangerous trees. These characteristics could include disease or defects, insects, slope and soil stability, and prevailing winds.

It is critical that the assessment considers the big picture rather than a narrow focus on individual trees. It should balance whether falling the trees creates a higher overall risk (increased fuel load and risk to fallers) verses the reduction in risk that removing the tree would produce. In many cases a no-work zone is a safer option for controlling the hazard; however this decision must be balanced with the fire control objective.



Tree hazards must be communicated to all workers so they understand the level to which the assessment was completed and the control measures in place. Regardless of the controls, the worksite should never be assumed to be 100% safe. Areas that have been assessed may still have a variety of hazards, including dangerous trees that were missed or changes to the worksite since the previous site assessment. Workers should maintain situational awareness, especially when there is an increase in winds, fire behaviour or other disturbances.





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Other important considerations regarding danger trees in wildfire:

- Assessments need to consider what work will be occurring in that location over the subsequent days. Falling trees where there will be no work performed due to lack of fire activity, changing priorities or lack of resources creates unnecessary risk to fallers.
- Having assessments and falling occuring at the same time or by the same person can lead to excessive falling or fatigue issues.
- Pay attention to trees along machine-constructed fire line where stems and roots may have been damaged by working equipment.
- Worksites need to be re-assessed regularly. Re-assessment needs to occur if: the work activity in the area creates more disturbance than originally assessed for; there is continuous burning and build-up index values are above established thresholds; or more than three days of continuous burning have passed, regardless of build-up index.
- Hollow trees may be burning on the inside look for smoke coming from holes and bark seams higher up the trunk. This is common in many species and may best be controlled by setting up a no-work zone within two tree lengths of the tree and wait until the tree burns itself down.



Additional Resources

- BC Government Wildlife Danger Tree Assessor's Course Information: www2.gov.bc.ca/gov/content/environment/plants-animals-ecosystems/wildlife/wildlifehabitats/wildlife-tree-committee/assessor-s-courses
- Danger Tree Assessor training is offered through the University of Northern BC. Here's a link to some additional information: www.unbc.ca/continuing-studies/wildlife-dangerous-tree-assessor-certificate-program



