

What is Tree Risk Assessment?

Tree risk assessment is done for two reasons:

1. Identify any hazardous situations and recommend action before damage is caused to property or people.
2. To assure the owner that the mechanical integrity of the tree is acceptable and that the tree can be retained. If trees are retained, the risk levels are explained and accepted.

Risk assessments will neither justify removal of healthy and safe trees, nor the removal of an unwanted tree. Tree aesthetics are unrelated to risk assessment.



Mature trees can be retained!



This tree had been topped. Decay penetrated the stem evidently causing it's failure.

Why perform a tree risk assessment?

- Ensure the safety of people and property,
- Promote tree health and work towards reducing future hazardous tree conditions by practising better tree care.¹

¹ Page 4 Tree Risk Assessment in Urban Areas and the Urban/Rural Interface Course Manual, PNWISA

Who should perform tree risk assessments?

Assessment of tree risk is a specialized area of expertise within the fields of arboriculture and urban forestry.



Certified Tree Risk Assessors (CTRA) must have a strong background and understanding of tree biology and tree mechanics. Certified Tree Risk Assessors must read the condition of a tree, inspect and record the assessment process and follow professional and legal standards and obligations.

Go to www.pnwisa.org, click on 'For the Pros' link for the list of qualified Certified Tree Risk Assessors.

Verna Mumby, CTRA #054, performing aerial inspection.

Tree risk assessment is a technical process requiring specialized training, good judgment, experience and skill.

Assessments must be based on good science and arboriculture principles, and be defensible in a court of law.



Verna Mumby using a Resistograph² to confirm the presence of decay in a large Douglas fir tree.

² The Resistograph machine precisely detects and measures decay and defects in trees and wooden structures. A fine steel drill is fed into the tree. As the drill enters the wood, the Resistograph records variable amounts of resistance encountered.

How is a tree risk assessment performed?

1. The tree's history is collected from the tree owner, including specific information about tree care, construction around the tree and changes to soil grade.
2. The tree is assessed in sections:
 - a. Below ground (roots, soil area),
 - b. Above ground at base (trunk and root flare),
 - c. Stem of the tree,
 - d. Canopy (branches).
3. All data is recorded on an assessment form, the risk potential is determined and mitigating measures are discussed in a written report.

Sample Report

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Tree Risk Assessment
September 9, 2010

Observations:
On August 26th, 2010 I assessed 9 trees at I utilized the International Society of Arboriculture (ISA) Tree Hazard Evaluation Form to assess each tree. A risk rating¹ of low, moderate, high or extreme is assigned to each tree along with recommended actions. The risk rating chart is on page 4.

Trees 1 and 2 are Douglas fir (*Pseudotsuga menziesii*), each 67 centimeters in diameter, canopy spread of 7 meters and 26 meters high (see Picture 1). Tree health of both trees is very good. They have never been improperly topped or construction work done around their root zone. The trees have very few crown defects. A few damaged hanging branches and dead wood needs to be removed. Risk rating is 5.

Tree 3 (T3) is a big leaf maple (*Acer macrophyllum*), located in the back yard near the house. It was assessed using the Resistograph machine² to detect the presence of butt or stem rot. I assessed the tree in two parts, stem 1 and 2. See Picture 2.

At 1.8 meter height I measured the diameter of each stem. Stem 1 (to the north) is 88 cm in diameter, stem 2 is 74 cm. The trunk below the 2 stems is 140 cm in diameter. Tree height is 27 meters and canopy spread is 13 meters. Tree condition is good. There is large dead wood in each stem to remove. A small cavity was found in stem 2, on the north side.

¹ Risk Rating: Low (3-5) Moderate (6-9) High (9-11) Extreme (12)

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Mumby's Arboriculture Consulting Division of Mumby's Tree Services Ltd.
ISA Certified Arborist / PNWISA Certified Tree Risk Assessor
Member, American Society of Consulting Arborists
www.treelady.ca



Verna Mumby of Mumby's Arboriculture Consulting has completed over 500 tree risk assessments throughout Vancouver Island, BC's interior and Alberta.

Tree assessments on private property

Clients include private individuals in rural and urban sites, golf courses, stratas, municipalities, regional parks, developers, architects, landscape architects and non-profit groups.



Acreage assessments

Mumby's Arboriculture Consulting carries WCB and liability coverage. Tree risk assessment work is provided at a reasonable cost. Email or call for a free estimate along with a sample of a tree risk assessment and report.

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