

## Field Guide for Assessing Potentially Hazardous Trees – (Appendix B)

(adapted from a FRI T handout, "Risk Assessment Guidelines for Hazard Trees: an easy to use field guide")

DEFECTS	MODERATE RISK	HIGH RISK
<b>Dead wood:</b> Dead or without bark		<ul style="list-style-type: none"> <li>* Any lodged branch</li> <li>* Any dead tree, top, or large branch</li> </ul>
<b>Cracks:</b> A split through bark extending into the wood. Wood fissures are not fused.	*Single crack extending into stem	<ul style="list-style-type: none"> <li>*Crack completely through stem</li> <li>*Two cracks on same stem arrangement with cavity or decay</li> <li>*Any large branch with a crack</li> </ul>
<b>Decay:</b> Wood that is decayed or missing (cavity).	*Cavity or decay affects 1/3 to < 1/2 stem circumference.	<ul style="list-style-type: none"> <li>*Sound wood &lt;1" for each 6" stem</li> <li>*Cavity or decay affects &gt; 1/2 stem circumference.</li> <li>*Any large branch with decay.</li> </ul>
<b>Weak Unions:</b> Includes ingrown bark between stems. Wood fibers are not fused.	* Weak union with ingrown bark.	*Weak union that is also cracked, Cankered, or decayed.
<b>Canker:</b> Area of missing, dead, or sunken bark, (mechanical injury or disease). Wood is affected behind canker.	*Canker or canker and decay affects 1/3 to < 1/2 stem circumference.	*Canker or canker and decay affects > 1/2 stem circumference.
<b>Poor Architecture:</b> Growth pattern weakness or structural imbalance.	*Any large branch unbalanced with respect to rest of crown or with sharp bend.	<ul style="list-style-type: none"> <li>*Tree with excessive lean.</li> <li>*Leaning tree with moderate defect at base, cracks, or buckling fibers.</li> <li>*Mature trees with history of branch sheds.</li> </ul>
Root Problems: Loss of structural support	*One major supporting root severed to < 40% of roots severed.	<ul style="list-style-type: none"> <li>*Leaning tree with recent root-lifting, soil movement or soil mounding</li> <li>*Inadequate root support &gt; 40% roots severed.</li> </ul>

**Hazard Tree** - a defective tree with a target.

**Target** - generally defined areas where we invite people to move through, linger, or stay. Includes facilities and personal property.

**Moderate Risk Potential** – moderate defects that may or may not result in eventual tree failure. Moderate weak unions and moderate poor architecture defects will eventually fail and increase in risk over time. Moderate cankers and decays can decrease in risk as additional wound-free sound wood is added. However, these trees on open sites, and with full crowns may fail when significant winds occur. Moderate defects are considered individually and in combination. Combinations of moderate defects may or may not increase the risk of failure. For example, moderate cankers and decay in contact with one or more cracks would indicate a high risk of failure. While a moderate root loss in contact with a stem decay or canker can remain a moderate risk.

**High Risk Potential** – Defects that indicate the tree has failed, is failing, or in imminent danger of failing. Action to remove tree should be taken as soon as possible.

