Hazard Tree Identification

**Widow Maker (Previous Failures)**
Failure history is a key element in predicting future failures.

**Weak Branch Unions**
A weak union occurs when two or more similarly sized branches grow so closely together that bark grows between the branches, inside the union.

**Old Wounds**
Old wounds serve as a potential source of wood rot and decay.

**Ooze/Fungal Activity**
Fungal activity, including mushrooms, conks, ooze, and brackets growing on root flares, stems, or branches, is an indication of advanced decay.

**Trunk Taper**
The diameter of the trunk should be largest at the base and decrease with tree height. Lack of a taper may indicate root failure.

**Sharp Bends**
Predictable failure points.

**Nesting Holes**
Nesting holes serve as a potential site of decay columns.

**Multiple Pruning Wounds & Poor Weight Distribution (Lion Tailing)**
Excessive pruning that strips out interior branches increases opportunity for decay at wound sites and failure when weight is concentrated at the end of the branch.

**Shear Plane Cracks**
Result of wood tissue pulling apart.

**Wounds/Broken Branches with Poor Wound Closure**
Potential source of wood rot and decay.

**Epicormic Growth**
New growth stimulated by pruning, damage, or infection. Indication that tree is under stress.

**Response Growth**
Unique bulges and or swollen or sunken bark patterns. An indication of internal decay.

**Wound-Wood Formations**
Previous injuries or obstacles in growth can exhibit unique wood fiber patterns, providing information from a period well before a failure.

**Cavity**
Cavities in trees are an indication of advanced decay. Stability of tree is determined by the ratio of sound to decayed wood.

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**Featured Expert**

**Mark A. Webber**
**Board Certified Master Arborist**

Mark Webber is a Board Certified Master Arborist with nearly forty years of relevant professional experience. He started working at farms and nurseries in 1975 and remains active today in the management of his own company, which he started in 1997. Mark earned a Bachelor of Science degree in Horticultural Science with a minor in Agricultural Business. Among his professional credentials, Mark is designated as a Board Certified Master Arborist, New Jersey Certified Tree Expert, Category 3 Arborist in the United Kingdom, Licensed Arborist in various states, Master Nursery Technician, and is Tree Risk Assessment Qualified.