

TREE FAILURE DATABASE - REPORT FORM

*REQUIRED FIELD

- 1** General Tree Info
- 2** Failure Type
- 3** Failure Specifics
- 4** Structural Defects
- 5** Decay or Injury
- 6** Maintenance History
- 7** Tree Failure Details
- 8** Weather Conditions
- 9** Comments & Save

1 Tree Genus* _____ Species* _____
 Cultivar _____ Country* _____
 State/Province* _____ County _____
 DBH* _____ in/cm Height _____ ft/m Age _____ years
 Tree/Site Ownership: Private Utility Other or unknown
 Fed./Nat.: (NFS BIA BLM DOD NPS)
 State/Province County Municipal
 Address/Site name _____
 GPS: Latitude _____ Longitude _____ (NAD83)

2 FAILURE TYPE* (select one)

TRUNK FAILURE

BRANCH FAILURE

ROOT FAILURE

3 Trunk Failure Specifics

Height of failure above grade* _____ ft/m
 Dia. at break (inside bark)* _____ in/cm

4 Defects Associated with Failure

- None
- Unknown
- Failed portion dead
- Decay Canker Species: _____
- Multiple trunks/codominant stems
- Dense Crown Flush cuts
- Topped One-Sided
- Low live crown ratio Included Bark
- Bow Crook Sweep/corrected lean
- Uncorrected lean
- Cracks in wood:
 - Vertical Horizontal
- Lightning Injury Animal Injury
- Fire Injury Insect Injury
- Mechanical Injury Girdling

5 Location of Decay

- HEARTWOOD
 - Avg. sound wood thickness _____ in/cm
 - Opening (cavity) at failure? No
 - Yes, opening _____ % of trunk circ.
- SAPWOOD
 - Avg. depth of rot _____ in/cm
 - Circumference rotted _____ %

Type of Decay

- Unknown Brown rot
- Canker rot White rot
- Conks/mushrooms/other signs? No
- Yes Name: _____
- Distance from conk to failure: _____ ft/m

6 Hardware

- None
- Girdling hardware
- Other device
- Cable Intact Failed
- Guying Intact Failed
- Prop Intact Failed
- Brace/bolt Intact Failed

3 Branch Failure Specifics

Dia. at break (inside bark)* _____ in/cm
 Total length failed branch _____ ft/m

Break at attachment: Yes No

If No, distance from the attachment to break: _____ ft.

4 Defects Associated with Failure

- None Unknown
- Failed portion dead Decay
- Dense Crown
- Heavy lateral limbs/Heavy ends
- Included bark Crook
- Failed portion is an epicormic branch
- Cracks in wood
- Mistletoe or epiphyte
- Mechanical Injury Lightning Injury
- Insect Injury Animal Injury
- Canker/Gall

5 Location of Decay

- HEARTWOOD
 - Avg. sound wood thickness _____ in/cm
 - Opening (cavity) at failure? No
 - Yes, opening _____ % of branch circ.
- SAPWOOD
 - Avg. depth of rot _____ in/cm
 - Circumference rotted _____ %

Type of Decay

- Unknown Brown rot
- Canker rot White rot
- Conks/mushrooms/other signs? No
- Yes Name: _____
- Distance from conk to failure: _____ ft/m

6 Hardware

- None
- Girdling hardware
- Other device
- Cable Intact Failed
- Guying Intact Failed
- Prop Intact Failed
- Brace/bolt Intact Failed

3 Root Failure Specifics* (select one)

- Roots broken
 - Dia. of largest broken root _____ in/cm
 - Distance from break to trunk _____ ft/m
 - Condition of broken roots:
 - Dead, no decay Decayed
 - Live, no decay Unknown
- Roots cut/severed (not decayed or broken)
 - Dia. of largest broken root at cut _____ in/cm
 - Distance from trunk to cut _____ ft/m
 - % of roots cut _____
- Root plate lifted out of ground
 - Root plate radius _____ ft/m
 - Root plate depth _____ in/cm
- Root restricted due to:
 - Container Root barrier
 - Sidewalk/curb Wall/foundation
 - Natural Feature Other
 - Distance from trunk to restriction _____ ft/m
 - % of root zone restricted _____
 - Root collar girdled? Yes No
 - % circumference girdled _____

Site/Soils Conditions

- Soil composition: Sand Silt Loam
- Clay Rock/gravel Unknown
- Soil moisture at time of failure: Unknown
- Dry Saturated Moist Flooded
- Restricted rooting depth due to:
 - Poor drainage Shallow or layered soil
 - High water table Compacted Other
- Other Site Conditions:
 - Soil eroded Compaction
 - Grade change Well surrounds trunk
 - Fill soil against trunk or planted too deep
- Depth of excess soil _____ in/cm

4 Defects associated with failure

- None Unknown
- Fire scar/injury Basal wound
- Low live crown ratio
- Corrected lean (sweep)
- Uncorrected lean Animal Injury
- Cracks in trunk prior to failure
- Surface roots or root collar wounded

5 Type of Decay

- % of roots decayed _____
- Conks/mushrooms/other signs? No Yes Name: _____
- Avg. sound wood thickness _____ in/cm
- Type: Unknown Brown rot White rot

6 Surface Treatment

- Mulch Bare soil Turf
- Ground cover Natural forest litter
- Gravel/rock Pavement Other

Irrigation:

- Infrequent Frequent Never

7 ADDITIONAL INFORMATION
Tree Condition and Pruning History

<p>Were the defects associated with failure visible before the tree failed? <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown</p> <p>At time of failure the tree was: <input type="radio"/> Dead <input type="radio"/> Declining <input type="radio"/> Alive</p> <p>Was there construction around this tree? <input type="radio"/> Yes <input type="radio"/> No If Yes, when _____ years ago</p>	<p>PRUNING HISTORY</p> <p><input type="checkbox"/> No pruning <input type="checkbox"/> Cleaned <input type="checkbox"/> Thinning</p> <p><input type="checkbox"/> Lions-tailed: <input type="radio"/> Proper <input type="radio"/> Excessive</p> <p><input type="checkbox"/> Reduction/Directional pruning: <input type="radio"/> Proper <input type="radio"/> Excessive</p> <p><input type="checkbox"/> Crown raised _____% of height</p> <p><input type="checkbox"/> Topped Diameter of stub at cut _____ in/cm</p>
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Habitat Information

<p>Trees recently removed in the vicinity of the failed tree: <input type="radio"/> Yes <input type="radio"/> No</p> <p>History of prior failures at site: <input type="radio"/> Yes <input type="radio"/> No</p>	<p>Setting</p> <p><input type="radio"/> Forest <input type="radio"/> Campground <input type="radio"/> Picnic area <input type="radio"/> Trailhead <input type="radio"/> Other developed forest site <input type="radio"/> Commercial site / Institution <input type="radio"/> Street tree / Median-Urban <input type="radio"/> Road side - Rural <input type="radio"/> Utility right-of-way <input type="radio"/> Yard / Garden <input type="radio"/> Park - Urban <input type="radio"/> Golf course <input type="radio"/> Parking lot <input type="radio"/> Other</p>	<p>Aspect</p> <p><input type="radio"/> N <input type="radio"/> NE <input type="radio"/> E <input type="radio"/> SE <input type="radio"/> S <input type="radio"/> SW <input type="radio"/> W <input type="radio"/> NW <input type="radio"/> Not applicable / Flat</p> <p>Slope</p> <p><input type="radio"/> No slope <input type="radio"/> <5 <input type="radio"/> 5-15 <input type="radio"/> 15-30 <input type="radio"/> 30-45 <input type="radio"/> >45</p>
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Date / Time of Failure

Date / Season Unknown

Date of failure (Mo/Day/Yr): _____ **OR** Season of failure:
 Time of failure hour _____ Spring Summer Fall Winter
 A.M. P.M. Unknown Year _____

8 WEATHER AND OTHER FORCES AT TIME OF FAILURE

Unknown Temperature (approx.) _____ °F/°C
 Wind speed (approx.) _____ mph/kph Precipitation: None Rain Snow Ice Unknown

9 CAUSE / RESULT OF TREE FAILURE

Why did this failure occur?

Result of tree failure:
 None (No damage other than the failure described) Property damage Personal injury
 Fire Power outage Removal of this tree Loss of other trees Other damage

Property damage estimate \$ _____ (US) Cleanup costs \$ _____ (US) If personal injury describe below.
 Additional Comments (injury, target, damage, etc.):