



# A Photographic Guide to the Evaluation of Hazard Trees in Urban Areas

## **TREE HAZARD EVALUATION FORM** 2nd Edition

Site/Address: \_\_\_\_\_

Map/Location: \_\_\_\_\_

Owner: public \_\_\_\_\_ private \_\_\_\_\_ unknown \_\_\_\_\_ other \_\_\_\_\_

Date: \_\_\_\_\_ Inspector: \_\_\_\_\_

Date of last inspection: \_\_\_\_\_

### HAZARD RATING:

_____	+	_____	+	_____	=	_____
Failure Potential		Size of part		Target Rating		Hazard Rating
_____						Immediate action needed
_____						Needs further inspection
_____						Dead tree

## TREE CHARACTERISTICS

Tree #: \_\_\_\_\_ Species: \_\_\_\_\_

DBH: \_\_\_\_\_ # of trunks: \_\_\_\_\_ Height: \_\_\_\_\_ Spread: \_\_\_\_\_

Form:  generally symmetric  minor asymmetry  major asymmetry  stump sprout  stag-headed

Crown class:  dominant  co-dominant  intermediate  suppressed

Live crown ratio: \_\_\_\_\_ % Age class:  young  semi-mature  mature  over-mature/senescent

Pruning history:  crown cleaned  excessively thinned  topped  crown raised  pollarded  crown reduced  flush cuts  cabled/braced  
 none  multiple pruning events Approx. dates: \_\_\_\_\_

Special Value:  specimen  heritage/historic  wildlife  unusual  street tree  screen  shade  indigenous  protected by gov. agency

## TREE HEALTH

Foliage color:  normal  chlorotic  necrotic Epicormics? Y N

Foliage density:  normal  sparse Leaf size:  normal  small

Annual shoot growth:  excellent  average  poor Twig Dieback? Y N

Woundwood development:  excellent  average  poor  none

Vigor class:  excellent  average  fair  poor

Major pests/diseases: \_\_\_\_\_

### Growth obstructions:

stakes  wire/ties  signs  cables

curb/pavement  guards

other \_\_\_\_\_

## SITE CONDITIONS

Site Character:  residence  commercial  industrial  park  open space  natural  woodland/forest

Landscape type:  parkway  raised bed  container  mound  lawn  shrub border  wind break

Irrigation:  none  adequate  inadequate  excessive  trunk wetted

Recent site disturbance? Y N  construction  soil disturbance  grade change  line clearing  site clearing

% dripline paved: 0% 10-25% 25-50% 50-75% 75-100% Pavement lifted? Y N

% dripline w/ fill soil: 0% 10-25% 25-50% 50-75% 75-100%

% dripline grade lowered: 0% 10-25% 25-50% 50-75% 75-100%

Soil problems:  drainage  shallow  compacted  droughty  saline  alkaline  acidic  small volume  disease center  history of fail  
 clay  expansive  slope \_\_\_\_\_° aspect: \_\_\_\_\_

Obstructions:  lights  signage  line-of-sight  view  overhead lines  underground utilities  traffic  adjacent veg.  \_\_\_\_\_

Exposure to wind:  single tree  below canopy  above canopy  recently exposed  windward, canopy edge  area prone to windthrow

Prevailing wind direction: \_\_\_\_\_ Occurrence of snow/ice storms  never  seldom  regularly

## TARGET

Use Under Tree:  building  parking  traffic  pedestrian  recreation  landscape  hardscape  small features  utility lines

Can target be moved? Y N Can use be restricted? Y N

Occupancy:  occasional use  intermittent use  frequent use  constant use

# TREE DEFECTS

## ROOT DEFECTS:

Suspect root rot: Y N Mushroom/conk/bracket present: Y N ID: \_\_\_\_\_

Exposed roots:  severe  moderate  low Undermined:  severe  moderate  low

Root pruned: \_\_\_\_\_ distance from trunk Root area affected: \_\_\_\_\_% Buttress wounded: Y N When: \_\_\_\_\_

Restricted root area:  severe  moderate  low Potential for root failure:  severe  moderate  low

LEAN: \_\_\_\_\_ deg. from vertical  natural  unnatural  self-corrected Soil heaving: Y N

Decay in plane of lean: Y N Roots broken Y N Soil cracking: Y N

Compounding factors: \_\_\_\_\_ Lean severity:  severe  moderate  low

**CROWN DEFECTS:** Indicate presence of individual defects and rate their severity (s = severe, m = moderate, l = low)

DEFECT	ROOT CROWN	TRUNK	SCAFFOLDS	BRANCHES
Poor taper				
Bow, sweep				
Codominants/forks				
Multiple attachments				
Included bark				
Excessive end weight				
Cracks/splits				
Hangers				
Girdling				
Wounds/seam				
Decay				
Cavity				
Conks/mushrooms/bracket				
Bleeding/sap flow				
Loose/cracked bark				
Nesting hole/bee hive				
Deadwood/stubs				
Borers/termites/ants				
Cankers/galls/burls				
Previous failure				

## HAZARD RATING

Tree part most likely to fail: \_\_\_\_\_

Inspection period: \_\_\_\_\_ annual \_\_\_\_\_ biannual \_\_\_\_\_ other \_\_\_\_\_

Failure Potential + Size of Part + Target Rating = Hazard Rating

\_\_\_\_\_ + \_\_\_\_\_ + \_\_\_\_\_ = \_\_\_\_\_

Failure potential: 1 - low; 2 - medium; 3 - high; 4 - severe

Size of part: 1 - <6" (15 cm); 2 - 6-18" (15-45 cm);  
3 - 18-30" (45-75 cm); 4 - >30" (75 cm)

Target rating: 1 - occasional use; 2 intermittent use;  
3 - frequent use; 4 - constant use

## HAZARD ABATEMENT

Prune:  remove defective part  reduce end weight  crown clean  thin  raise canopy  crown reduce  restructure  shape

Cable/Brace: \_\_\_\_\_ Inspect further:  root crown  decay  aerial  monitor

Remove tree: Y N Replace? Y N Move target: Y N Other: \_\_\_\_\_

Effect on adjacent trees:  none  evaluate

Notification:  owner  manager  governing agency Date: \_\_\_\_\_

## COMMENTS