



Checklist for Tree Damage

Before determining what is causing problems with your trees or shrubs, conduct a thorough inspection of the site and surrounding area, identifying tree and shrub species.

Go through this checklist to identify the cause of insect and disease problems with your trees and find a possible solution.

1. Conduct a thorough site inspection

- Check the surrounding area for:
 - Power lines - improper pruning
 - Water and sewer lines and out flow area - nutrient and flooding issues
 - Sidewalks, pathways and vehicle parking areas - compaction and salt issues
 - Mechanical damage - lawnmowers and rotor tillers
 - Livestock and wildlife issues, causing
 - Barking – peeling the outer protective layers away
 - Browsing – eating buds, foliage and shoots
 - Budding – feeding on buds and emerging foliage
 - Clipping – severing shoots, stems and roots
 - Pulling – extracting seedlings from the ground
 - Rubbing – damaging the branches or main stem tree
 - Trampling - bruising or crushing seedlings and compaction
 - Soil compaction and root damage
 - Nutrient issues – urine can easily kill trees

- Consider environmental conditions for problems with trees:
 - Soil
 - Clay – roots can't go through
 - Peat – too acidic
 - Loam – great for growing
 - Dry soil or sand –drought
 - Wet area – waterlogged
 - Light – low light, shade, full sunlight - issues with growth
 - Prevailing wind direction – possible wind damage
 - Topographic features - hills, slopes, depression - issues with drainage
 - Drainage and ponding – how long does an area stay wet after spring melt or heavy rains
- Municipal and provincial roads and power line issues
 - Weed spreading issues via railway
 - Road and culvert building – roots damage during construction
 - Tree pruning under power line – potential disease spreading
 - Dust issues and salt use on roads

2. Insect damage thorough inspection:

- | | |
|--|--|
| <ul style="list-style-type: none"> <input type="checkbox"/> Trunk Damage <ul style="list-style-type: none"> <input type="radio"/> Boring <input type="radio"/> Bark peeling <input type="radio"/> Discoloration <input type="radio"/> Sawdust <input type="radio"/> Oozing <input type="checkbox"/> Seed Damage <ul style="list-style-type: none"> <input type="radio"/> Debris and sawdust <input type="radio"/> Boring <input type="radio"/> Discoloration <input type="radio"/> Deformation & Stunting | <ul style="list-style-type: none"> <input type="checkbox"/> Leaf Damage <ul style="list-style-type: none"> <input type="radio"/> Leaf defoliation <input type="radio"/> Discoloration <input type="radio"/> Wilting <input type="radio"/> Deformation and stunting <input type="radio"/> Galls <input type="radio"/> Chewing, piercing, holes <input type="checkbox"/> Root Damage <ul style="list-style-type: none"> <input type="radio"/> Basal sawdust <input type="radio"/> Root loss <input type="radio"/> Bark loss |
|--|--|

3. Disease damage thorough inspection:

- Fungus on trunk, roots, branches
- Dieback
- Discoloration
- Wilt
- Galls, swelling and knots
- Rots and decays
- Distortion of leaves
- Fruiting bodies on needles or leaves
- Blight - oozing

4. Environmental damage thorough inspection:

- Chemical damage
 - Wilting and spot damage
 - Wavy or curled leaf margins
 - Chlorosis
 - Abnormal swelling and twisting
 - Redding, browning and casting on coniferous
 - Premature defoliation
 - Killing portion or whole tree in short period of time
- Frost - patchy leaf on aspen or sudden wilting on coniferous
- Drought – not watering, sandy soil
- Winter Desiccation – top tree brown while bottom alive
- Salt –physical damage due to particles or absorption through roots
- Pollution near large industrial areas or oil wells
- Fertilizer –either by livestock manure or from field or over fertilizing
- Soil Compaction – clay and in urban area
- Frost damage on trunk
- Lighting

- Weed control systems issues
 - Plastic mulch – overheating and chocking
 - Organic mulch – wood chips, flax shives, slough hay – not properly installed or leaching issues with fresh organic mulch
 - Shale or rock- physical damage during construction
 - Woven cloth – not properly installed
 - Cultivation – root and stem damage with equipment
 - Herbicides - not properly used
 - Combination of all above

- Watering issues
 - Too much water or improper watering
 - Water quality never tested – salt issues
 - Soil moisture never tested
 - Late fall watering is never done
 - Improperly installed sprinkler system

- Pruning issues
 - Trees improperly pruned
 - Pruning during rain or wet day – ideal for disease spreading
 - Unsterilized pruning tools
 - Damage from rubbing due to no pruning
 - Suckers never removed
 - Cavities, dead and diseased branches
 - Improperly balanced tree
 - Prune lower branches of conifers to avoid fire hazard
 - Replace dead trees – ASAP so that gaps don't form in the shelterbelt