

Tree Trouble-Shooting Guide

Use this as a guide to determine tree pests/problems.

Things to Consider:

Observation of the Tree(s):

- Age of tree(s).
- Are healthy buds showing for next year - if brown & dry consider the tree dying or dead
- Are they crowded - originally planted too close together affects air circulation later?
- Planted in single row vs multiple rows?
- All the same species in the row or a mixture of species (e.g. spruce, Scots pine, ash)?
- Watering regime after planting and following years - regular; sporadic or not at all?
- How were they planted - in a shallow depression or on a mound?
- Time of year when planted/transplanted - mid-summer is not a good time.
- Was mulch used - what kind?
- Was landscape fabric used?
- Are trees adapted to the area they are growing in? For example, if originally planted on dry land...are they growing in standing water now? Might be too wet now and are 'drowning'.
- Were branches pruned? How? When? What is the location of cuts?
- If pruning for disease - were tools sterilized between cuts?

Local Environmental Conditions:

- Are shelterbelts/trees adjacent to cropland - possible herbicide drift?
- Any weed control done in the adjacent lawn area - possible herbicide drift.
- Was roadside vegetation sprayed?
- Are trees located near major highways/grid roads? Salt damage is possible from aerial salt spray off of highway from traffic and/or soil accumulated salts.
- Trees planted - are they tolerant or sensitive to salts?
- Corral runoff - were trees planted too close or have the roots of older trees grown into the runoff area?
- Septic areas - have roots of older trees grown into the septic area?
- Watering: Any done in late fall - how and when? Was watering done along the trees drip-line, by trickle irrigation, by hand...or? Was sufficient water applied?
- Were trees planted adjacent to building(s) - heat will radiate off of building. Which side of the building were the trees planted...south, west, other?

- Are branches below or above the snowline affected - yes/no?
- Wind exposure - to winter winds.
- Natural product(s) and/or herbicides applied in past years - e.g. dormant oil is believed to remove color of Colorado blue spruce.
- Grass/weeds/vegetation trimmed underneath? Can air circulate through trees?
- Trees trimmed into hedge? - Reduces air circulation.
- Weed whipping or mowing too close to the trunk - small nicks in trunk are entry points for diseases.
- Branches trimmed up from the ground 1-2'? When was that done?

Pests/Diseases:

- Ends of branches ragged?
- Clumps of large black lumps formed near ends of branches?
- Needles appear yellowish, reddish, and purplish or other color?
- Conifer needles missing or shedding.
- Remaining needles are in a bunch at the ends of the branches.
- Complete needle drop and lower branches turned grey?
- To check for spider mites tap a spruce branch on white paper - smear with hands - any red streaks would indicate spider mites.
- Notice needle drop closer to the trunk.
- Canola-straw colored bands on conifer needles.
- Broad-leafed tree (Deciduous) tips shriveled, poorly formed, curled etc.
- Sawdust @ base of tree or on branches?
- Top of tree or ends of branches resemble shepherd's hook?
- Were trees pruned; when? Sap attracts insects.
- Holes in trunk either singularly (borers/wood wasps/birds) or laddered by the yellow-bellied sapsucker.
- Squirrel damage - clipping cones in fall; chew bark.
- Bark missing either on tree trunk around very base - usually on well mulched ornamental shrubs - check for teeth marks, signs of gnawing by rodents and rabbits.
- Larger sections of bark have rotted away from base of tree - could be a root rot.
- Bark stripped off, especially on Scots pine, look for porcupine droppings.
- Tips of branches missing? Deer do browse tips of pines, roses, shrubs, vines. Look for deer droppings.
- Bark missing - deer could be rubbing velvet off of antlers; look for deer droppings.

Weather since Tree(s) Planted: Current & Past:

- Drought history of area since tree(s) planted.
- Severity and duration of winter.
- Amount of snowfall.
- Lightning strikes in area.
- Chinooks and mild winters – can lead to sunscald -> crack in bark from sap expansion.