

### **April 2013 Walt Bubelis: Plant diseases- how to identify, how to treat**

All members were ushered outside onto Cindy's woodsy, Cottage Lake-front lot to see it through the eyes of our esteemed NW horticulturalist expert and recently retired Edmonds CC Hort department head, Walt Bubelis. Cathy introduced Walt and his community accomplishments, and as we all remembered from his last RGC speaking engagement, we came equipped with plant disease samples for his examination, as time permitted.

First up, was a spectacular Japanese maple near the front entrance that appeared to have some problems. This was an older tree that was placed in shade, but had been slow to emerge this year. Walt explained that some trees are genetically slow to emerge like beeches and oaks. He mentioned that around July 4th is the last date for a plant to show some regrowth, so don't be too eager to pronounce the death sentence until then. He showed us how to peel back the bark with a pocket knife to reveal any problems at different levels—low and mid-trunk—and to determine its viability. Walt determined that Cindy's tree had the dreaded verticillium wilt, common to maples as evidenced by black streaks under the bark, advancing up the tree. This virus is soil-borne and can remain there for 20 years or more.

The question was asked if the tree could be saved. Some success has been seen with a broccoli slurry (made from the stems) spread around the soil. Sulfur spray might also help early on and was first recommended by Homer. But when it's far gone as in this case, it's best to remove the tree and not plant anything susceptible to that virus back in the spot. Aside from the virus being in the soil at planting time, another possible culprit for this disease striking the tree would be girdling of the roots below the soil. To check for this condition, dig a wedge-shaped trench that goes toward the center and root prune to help alleviate the girdling. Trees like cornus mas and stewartia are resistant to this virus. Cindy was cautioned to check out other maples on the property. Another option, which Cindy will probably pursue, is to paint the entire trunk or use it as a trellis support for a vining plant. Questions arose about changing out the soil (not effective, since it remains so long and is a huge task) and awareness of "clean" soils we use for our plant sale donations.

We moved onto other parts of the shade garden and discovered a typical shady lawn site in the NW, with moss and opportunistic weeds. Walt had earlier taken a soil sample and sent it to the Univ. of Massachusetts, resulting in an analysis of slightly acid, clay over lake sand components and a pH of 6. Recommendations for the lawn included: limbing-up some of the tall fir trees to allow more light (which she'd already done), either become a moss lover, or aerate and amend with a top dressing of fine compost, 40 lb. dolomite to get the pH back up to eight. Then overseed with a shade-tolerant grass like fescue and an application of an organic fertilizer. Further on

down the garden path, an island of shrubs/trees/perennials caused us to stop and observe. A redbud specimen displayed some past wounds where limbs had been removed or broken off. It was good that no “tar” had been painted on, since that has been discovered to be harmful. Because this was also a shady site, moss on the limbs (usually on the north side) pose not too much of a problem; but lichens, on the other hand, can be destructive. Simply knocking off the lichens does not get rid of them, since they have tentacles that invade the tissue. A spray that contains iron is most effective in eliminating lichens. Various shrubs like rose of sharon, witch hazel were also examined in this spot. Further down towards the lake, an old black walnut tree was described as a tree that doesn’t allow anything to be grown underneath it by emitting a poison—a natural defense mechanism. Sunflowers also have this idiopathic capability.

As temps dropped and daylight ebbed, many of the specimens brought from member’s yards were examined by plant doctor, Walt. These included: dogwood tree branch (anthracnose—remove dead twigs, open up the air circulation, spray, use dry pine mulch to prevent spores from splashing up), St. John’s Wort, winter-damaged azalea, weeping cherry tree (bacterial infection), camellia brown leaf drop (typical at this time of year), anemic looking rhody leaves with red spots on back (insect frass, or as Walt explained lacebug poop), Brown rot on a peach limb (use fungicide), pittosporum (in too wet of a spot and needs more air, Gravillea (needs nitrogen), Harry Lauder’s Walking Stick (spores have killed the branch—remove all dead ones, provide good air circulation and spray to reduce spores). As always, Walt’s easy-going, informative, hands-on demo was just what the doctor ordered for those of us there to get some plant disease analysis 101. Time and daylight ran out, but those who lined up early asking for help for their “babies” were most appreciative of the time Walt spent with us and were on a mission to get to the root of their disease problems. We reassembled back in the house to warm up and thank Walt for his time and informative lecture.