

Good day !

I hope that your spring is going well and that all of your trees survived the winter unscathed , Winter can be a tough time for trees and humans so here's to all of you hearty(and hardy) survivors.

The past few years have been trying times for our trees especially the Elms, dutch elm disease (D.E.D.)has made a dramatic comeback and the three year drought (which has eased since last spring) didn't help either.

D.E.D.is caused by a fungus (*Ophiostoma ulmi*) which is spread by two species of beetle, our native elm bark beetle(*Hylurgopinus rufipes*) and the European elm bark beetle(*Scolytus multistriatus*) .

The European elm bark beetles over winter as larvae in the bark of dead or dying elms, in the spring they complete their growth , transform into pupae and later into adult beetles. If the wood that they emerge from is infected they will spread the fungus to healthy trees through bodily contact with the wood . Our native species pass the winter either as larvae or adults, the latter mostly over winter in tunnels in the thick bark at the base of healthy elm trees. Our cold winters kill off most of the adult European elm bark beetles, those that survive do so in protected areas usually home firewood piles.

The other primary means of spreading the fungus are root grafts and pruning healthy trees with tools that were used to take down infected trees . Root grafts occur in groves of the same species when trees get crowded and their roots cross over each other and eventually grow together forming a "graft "like structure. The pathogen is then passed directly from the infected tree to the nearby healthy one so if you have a few elms growing close together and one of them gets D.E.D. the odds are that it will spread to the other trees through this direct method . The other direct method is far easier to eliminate, just make sure that all implements used to take out infected trees are thoroughly washed with a ten percent solution of bleach and water (that's one part bleach to nine parts water) before they're used on healthy trees. If you have hired a "tree service "to trim any of your healthy trees make sure that this has been done, If you're in doubt then either wash the tools to be used yourself or tell them to leave. That is your prerogative, remember , it takes several years to grow a tree why take a chance of losing it over a few cents worth of bleach and water ?

The city tree board is an all volunteer organization , folks like you that appreciate the many benefits our all too scarce trees provide for our little town so don't take it personally if you receive a letter with the bad news that you've got a problem tree, remember , we're just trying to catch up with a nasty disease that has made a **BIG** comeback these past few years because of weather conditions , (drought) our location next to the river, and people bringing diseased wood into town and storing it in their woodpiles . (habitat for elm beetles to over winter)

So., *What can our citizens do to help stop the spread of D.E.D. ?* Education is a good first step because the sooner a problem tree is identified the quicker it can be dealt with and a source of fungus and spore carrying elm beetles can be eliminated !

Can I store elm wood safely in my woodpile ? Only if **ALL** of the bark has been removed ! Even Siberian elm (*Ulmus pumila*) can catch the disease and spread it to the other more susceptible species of elm trees before it succumbs to the fungus.(another common name for Siberian elm is "Chinese Elm"). so **don't** store it in your woodpile, remember, there are other elms around that can be infected , maybe your neighbors tree, One down the block? Take a look around , there's still elms out there , let's try to keep them alive !

Do fungicides work ? Usually they can prolong the life of a tree for five to ten years if they're applied **before** the tree is infected , and they're not cheap ! Water is, drought stressed trees are more susceptible to disease than healthy , thoroughly hydrated trees. **Water your trees when it's dry !**

We'll be sending out more letters to people with D.E.D. infected trees this year , we have to stay on top of things or we will continue to lose trees and soon there won't be **ANY** American elms left , that would be a sad day indeed ! If we're diligent and unrelenting there is a good chance that the American elm(*Ulmus americana*) will still be around for our grandchildren to enjoy and **THAT**, folks is what we need to remember , what we do today and in the near future determines what kind of world we will pass on to them. So to quote one of the all time great American newscasters "that's the way it is", Good Luck !