

Tree Pests & Disease

Dutch Elm Disease

What is Dutch Elm Disease (DED)?

Dutch Elm Disease (DED) is caused by a fungus spread by tiny bark beetles (2mm – 3mm) whose larvae makes tunnels under the outer bark of dead or dying elm wood creating distinctive feeding ‘galleries’.



If that wood contains the DED fungus, each new generation of beetles can infect healthy elms.



Canada is home to three native species of elm. All have been affected to varying degrees by Dutch Elm disease.



[2017 DED in Saskatchewan](#)

What does an Elm Tree look like?

- elms have oval-shaped leaves with a **saw-toothed edge** that alternates in two rows pointing away from the shoot
- One side of the leaf joins the stalk **higher than the other**



- The seeds are surrounded by round papery discs with the single seed in the centre
- Their winter shoots are generally dark grey/purple with slightly darker purple/brown buds
- The bark is quite **coarse and rough** and can have an intersecting, diagonal pattern



How can you recognize DED?



First signs of the disease can be seen in one or more branches near the top of the tree. The leaves may wilt, curl and turn yellow and brown while still remaining on the tree as the disease blocks the water conducting tissue of a branch. This process is called flagging and usually appears in midsummer (late June to mid-July).



An infected twig sample will have red/brown streaks through the sapwood. The damage gradually spreads to the rest of the tree and the tree eventually dies which can take a few years but can also occur within a single season, if the tree was already weakened by other environmental factors.

Several other diseases have similar symptoms so the only way to confirm DED is in the lab. The Ministry of Agriculture's [Crop Protection Laboratory](#) offers free DED testing to Saskatchewan residents.

Tree Disposal and Pruning Bans

Provincial regulations prohibit pruning of elm trees from April 1 to August 31 each year. The beetles are most active then, and fresh cuts attract them, increasing the chance of infection.



Anyone wanting to dispose of an elm tree during a pruning ban needs special permission from the City. The wood is strictly prohibited from the Meadow Lake compost site. For disposal, elm wood has to be brought to the [Regional Landfill](#).

It is illegal to buy, store or transport elm firewood. The most common way of spreading the disease is through transported infected firewood from one place to another.

[DED Disposal Info](#)