

DUTCH ELM DISEASE

In the past two years, Dutch Elm Disease has roared back in Minneapolis. At the height of the DED epidemic of the late 70s, over 50,000 trees were lost. 2004 has been the third worst year in record, with 10,000 trees identified, half on public and half on private land.

Causes

DED is caused by a fungus and is fatal. The fungus enters the tree in one of two ways. The feeding and breeding of the elm bark beetle cause the majority of DED cases. The fungus can also spread to adjacent trees through grafted root systems.

Identification

A Tree Inspector that works as an Arborist for the MPRB diagnoses diseased trees on private and public residence. Each of these Arborists is licensed by the state of Minnesota. Inspectors look for wilted leaves or branches as the initial symptom of DED. Taking a twig sample and peeling back the bark confirms the disease. On a healthy elm the underlying wood is white. If DED is present the underlying wood has distinctive brown streaking. After confirming that a tree has DED, a ring of orange paint is applied around the trunk of the tree. This serves as public notice of the impending removal. A large letter is painted on the trunk of the tree. This letter indicates which Inspector condemned the tree. A yellow door hanger that provided details and contact information is left at the property.

Removal

Prior to removing a boulevard tree, "No Parking" signs are posted well in advance of the work. Vehicles that violate these postings are towed away by the City. Removal of a boulevard elm occurs in two stages. The first is called topping whereby the top branches are removed. This reduction in the size of the tree allows for the remainder of the tree to be dropped. The second stage of removal is when the main trunk of the tree is dropped into the street or other available space. The large logs that result from this stage are transported to a facility where over 98% of all wood is recycled.

The woodchips that are generated from topping are made available to the public at free woodchip distribution sites. Using elm woodchips does not spread DED. Woodchip locations can be found on the MPRB website. www.minneapolisparcs.org.

Residents sometimes wonder why tree removal is not delayed since an infected tree is going to die anyway. It is important that diseased elm trees be removed as quickly as

possible so that they do not serve as a breeding ground for the elm bark beetle. Beetles fly from breeding trees and infested firewood to healthy trees thus spreading the fungus. It is actually against municipal ordinances to store elm logs with the bark intact. The longer a tree remains standing, the more beetles will result. Controlling the spread of Dutch Elm Disease relies on controlling the infected beetle population, which in turn relies on controlling the number of dead and diseased trees.

There are private companies that provide treatment services for Dutch Elm Disease. This is done through injections of a chemical at the root flare of the tree. Trees that exhibit only slight wilting may be the best candidates for injection. The injected chemical can be preventative or therapeutic in nature. Private property owners that own a unique or specimen elm are best suited to using this service. The MPRB often works with private property owners by halting the removal orders of a condemned elm until a private company can examine the tree and determine if it is a good injection candidate. The MPRB does not assume any cost of injection and does not inject public trees. If a public tree is injected, a free permit must be obtained from the MPRB. The permitted company is responsible for any pruning and disposal of infected wood that they prescribe as treatment.

After a boulevard tree is removed, the stump is measured and the size is painted on the cut surface. This means that the stump has been recorded for grinding at a future date. In many cases grinding the stump is needed to make room for the planting of a new tree. Stump removal is strictly dependent upon budgeted funds.

Planting a replacement tree on the boulevard is strictly dependent of funding. These trees are planted during May. If a removed tree measures six inches in diameter or less, a replacement tree is automatically scheduled. Otherwise, residents are encouraged to call to be considered for a new boulevard tree. Each spring, the MPRB plants trees at addresses where trees are needed and at addresses where trees have been requested. The tree type conforms to the species that is assigned to that block. If a resident wants to plant their own tree, they need to request a free permit from the MPRB Forestry Section.

The MPRB has been controlling DED since the late 1970s. At that time over 30,000 elms were removed in one year. The Forestry Section's goal is to keep the number of removals at a manageable level. This not only preserves remaining trees but also delays the cost of removal and replacement. For more on the history of Dutch Elm disease in Minnesota, visit

<http://www.extension.umn.edu/distribution/naturalresources/DD3765.html>