

Elm Firewood Spreads Dutch Elm Disease

Ralph Sievert, Director of Forestry March 13, 2004

During the summer of 2003, over 2000 diseased elm trees were removed from boulevards and parks. Another 2000 were removed from private property. The reason for these removals is to control the spread of Dutch Elm Disease (DED). While these numbers are nowhere near those of the late 1970s when 30,000 trees were lost in one year, they are still significant. The sad part is that such losses can be reduced if homeowners would properly dispose of elm logs and not store them as firewood.

The Minneapolis Park and Recreation Board has been in the business of controlling Dutch Elm Disease since it first appeared in 1963. The success of this control has been the rapid disposal of diseased wood. This lesson was learned from other municipalities that first experienced losses from DED.

DED is caused by a fungus that first entered the United States on elm logs from Europe. In the beginning it was not known how the disease spread from tree to tree. After years of research the destructive cycle of DED was discovered. One method of transmission is when roots of nearby trees graft together. However, the majority of incidents are caused by movement of the Elm Bark Beetle (EBB).

The EBB is a very small insect that is the size of a pencil tip. As part of its life cycle the EBB feeds on the tiny twigs of American Elm trees. In so doing it spreads the microscopic DED fungus from tree to tree. It is only logical that the more EBBs that are feeding, the more DED spreads.

Because EBBs reproduce in the dead wood of certain species of elms, the control of DED lies in reducing beetle breeding places. This is why the Minneapolis Park and Recreation Board has such a vigorous program of controlling diseased elms. As soon as a tree is discovered to have DED, it is condemned and removed. Waiting for the tree to completely die would be a mistake. The cities that waited to remove disease trees until they died spent a significant amount of money in a short amount of time. In comparison Minneapolis spent less money and would have very few remaining elms if this approach had been taken.

It doesn't matter if the dead wood of an elm tree is standing in a dead tree or if it is cut up into smaller pieces. The EBB will use it for reproducing in either form. This is why it is so important not to store elm logs as firewood. For example, one fireplace size elm log is capable of producing several thousand EBBs. Since EBBs can fly for more than a mile it is easy to see how quickly the insect can infest nearby trees.

Each summer, the Forestry Section assigns Diseased Tree Inspectors to look for DED infested trees. These arborists diligently monitor both public and private elms. Municipal ordinances give the inspectors the right to enter private property as part of these duties. As a result they become quite familiar with the DED numbers in a particular neighborhood.

When the number of diseased elms in a particular location increases to a point where more elms are being condemned than would be otherwise, the inspectors instinctively look for elm logs that are being stored as firewood. Homeowners that are not aware of the fact that elm logs serve as a breeding ground for EBBs are unknowingly helping to spread the disease. Such firewood piles are condemned just like a tree would be. If the property owner does nothing after notification, a

contractor can be assigned to dispose of the elm logs. The cost may then be assessed to the property.

While this method works, it is actually the least preferred course of action. The best route is education. The Forestry Section of the Minneapolis Park & Recreation Board believes that property owners will not store elm logs for firewood when they know the consequences of doing so. If you are storing elm logs with plans of using them as firewood, please dispose of them properly. There is nothing wrong with burning the logs as a means of disposal. However, this should be done before there are leaves on trees. Otherwise take the logs to a nearby recycling facility.

Minneapolis is known across the country as one of the last havens for streets that are lined with the arching canopy of American Elms. By condemning diseased trees and eliminating elm firewood piles, we can continue this reputation for years to come.