CHARLOTTETOWN

Great things happen here.

DUTCH ELM DISEASE

Dutch Elm Disease (DED) is a fungal disease of elm trees that was first detected in Charlottetown in 1996. The fungal spores enter the tree, clogging the vessels that transport water and nutrients up and down the tree. This usually kills the tree in 3-5 years.

HOW IS DED SPREAD?

By elm bark beetles- small, shiny brownish-red beetles that are rarely seen. Their activities, (egg laying, larvae feeding and overwintering), cause wounds in the elm trees. These wounds and the elm bark beetles themselves, release chemicals that attract more beetles to the elm trees. If the trees are infected with DED, the beetles become covered with fungal spores which they spread around as they move from tree to tree.

Through human activities- moving or storing infected elm wood, such as firewood; pruning infected/healthy elms without cleaning pruning tools between cuts; pruning elms when elm bark beetles are active (beetles hibernate during the winter); not removing DED infected elms; improper disposal of DED infected wood.

Through tree roots- roots from adjacent trees form grafts that allow nutrients and water to move back and forth from tree to tree. Fungal spores can be passed from tree to tree as well.

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BE ON THE LOOKOUT!

Drooping, wilting, curling, yellowing or browning of the leaves at the ends of the branches (called flagging). Dead and dying bracnhes.

Water sprouts occur on the main trunk and on individual branches in the tree canopy.

Larval feeding under tree bark causes fern-like shaped wounds unique to elm bark beetles.

Adjacent elms form root grafts that pass DED from one tree to another causing rapid wilting and death.

Brown staining under the bark. (Photo courtesy of Saskatchewan Environment.)

Woodpecker activity may be an indication that elm bark beetles are present.

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WHAT CAN BE DONE ABOUT DED?

Monitor your elm trees to detect DED symptoms as early as possible. The City monitors elm trees in Charlottetown one public and private property.

Pruning may extend the life of your elm tree but will not save it once it is infected....**there is no known cure for DED**. Elm species **should NOT be pruned between April 1st and September 30th** as open wounds help to spread DED by attracting elm bark beetles.

Prompt removal and disposal of infected trees is very important to help prevent spread of DED. When an elm is removed, the stump should be ground. If this is not possible, the stump should be debarked to remove the habitat of the elm bark beetle.

Proper disposal helps prevent the spread of DED. Ideally elm maintenance should be done in the winter months and all elm wood disposed of by March 31st. If you have to remove your elm in the summer months, the wood must be immediately burned or buried as it will attract elm bark beetles. If you must transport elm wood, go directly from the location of removal to the point of disposal.

Don't store elm wood for firewood - it is illegal in several provinces.

Keep your elms healthy - proper pruning, watering, fertilization = less stress and more resistance.

When planting trees **choose other resistant species** or plant DED resistant varieties of elm such as : Patriot, Pioneer, Valley Forage, Princeton, New Horizon, etc.

If you have an elm tree that you would like to protect, **you can hire an arborist to inoculate** your tree to increase its resistance to DED.

For more information visit: https://www.charlottetown.ca/

Photos courtesy of David Carmichael, Andrew Williams, Beth Hoar