

## Dutch Elm Disease Management in Manitoba

Communities throughout our province historically planted hundreds of thousands of hardy and beautiful American elms making effective management of Dutch elm disease (DED) particularly important to Manitobans. Many communities, in cooperation with the Manitoba government, have been successfully managing DED for more than 40 years. This has allowed them to retain mature urban tree canopies that provide valuable benefits such as wind reduction, shade, wildlife habitat, and cleaner air.

### What is Dutch Elm Disease?

DED is an introduced disease caused by a fungus that kills American elm trees. The fungus is mainly spread from elm to elm by native elm bark beetles when they feed in the canopy of elms and overwinter under the bark at the base of the trees. Bark beetles are attracted to fresh pruning wounds, and for this reason, it is illegal to prune elms from April 1 to July 31, when the beetles are the most active. Furthermore, the bark beetles breed in dead and dying elm material including elms infected with DED, so much of DED management centres on the removal and sanitation of this material.



Diseased elm tree

## Background

The Dutch Elm Disease Management Program has been in existence in Manitoba ever since DED was first detected in this province in 1975. The current Dutch Elm Disease and Urban Forest Management Program is administered under The Forest Health Protection Act and Forest Health Protection Regulations (for more information on this legislation please go to: <http://web2.gov.mb.ca/laws/statutes/ccsm/f151e.php>).

Presently, the program is active in 38 communities that have significant elm populations. In addition, the City of Winnipeg manages DED within its city limits.

## Dutch Elm Disease Management Agreements

Communities participate in the program through Community Forest Grant agreements with the province. Under these agreements, the province provides technical assistance, educational materials and support, funding for tree removals and urban forestry activities, and annual surveillance where trained inspectors search for elm firewood and infected elms.

Participating municipalities remove trees identified and marked by provincial inspectors. Additionally, each of the communities must take measures to protect their elms from DED. These measures include activities such as regular pruning of dead branches from elms that can attract elm bark beetles, basal spraying of an insecticide to elms to reduce elm bark beetle populations, and public education.

The following communities are currently participating in the Dutch Elm Disease and Urban Forest Management Program:

Altona	Gimli	Portage La Prairie	St. Clements
Arborg	Gladstone	Reston	Ste. Rose du Lac
Birtle	Headingley	Ritchot	Steinbach
Boissevain	Killarney	Rivers	Stonewall
Brandon	Manitou	Riverton	Swan River
Carman	Minnedosa	Russell	Treherne
Crystal City	Morden	Selkirk	Virden
Deloraine	Morris	Souris	West St. Paul
Dauphin	Neepawa	Springfield	
East St. Paul	Pilot Mound	St. Andrews	

## Dutch Elm Disease Surveys

The province's Forestry Branch manages the survey program. From the middle of May until September of each year, provincially appointed inspectors and officers search for elm firewood and diseased elm trees in managed communities.



Provincial inspectors preparing for surveys



Provincial inspectors marking elm wood

Starting in mid-June, when infected trees usually start showing DED symptoms, inspectors begin to survey for trees that are infected with DED. Dead and infected elm trees are highly attractive to bark beetles as brood material and may produce large numbers of elm bark beetles.

These surveys require that inspectors visually inspect every property in the community. This means that inspectors will drive slowly (10 km/hr) down each street and back lane looking for elm wood or infected elm trees. Properties that cannot be easily seen from roads or back lanes will be surveyed by foot (i.e. riverbank properties). Inspectors have binoculars and may use them to look at the crowns of trees for DED symptoms, or they may use them to look at firewood piles. Inspectors wear high visibility vests that identify them as Manitoba government employees.

Under The Forest Health Protection Act, inspectors and officers may enter upon private property for the purpose of inspection without permission from the property owner. Inspectors may do this to inspect a firewood pile or to look at a potentially infected tree. Inspectors will attempt to speak to the resident by knocking on the door if there is elm wood present or if a tree is suspected of having DED and needs to be sampled. If someone is available, the inspector will explain the reason for inspection. They will have identification with them that shows that they are inspectors under the Act. However, if no one answers, the crew will proceed with sampling

or marking trees or firewood. Sampling involves clipping a branch to look for a coffee coloured stain under the bark that is indicative of DED.



Inspector taking a sample



DED infected trees marked for removal

When elm wood or DED infected trees are found, the inspectors make a record of the detection, physically mark the material with orange tree marking paint, fasten a metal tag to the material, and leave a letter at the property or with the resident.

## **Removals**

### **Elm wood**

Elm firewood can contribute to the spread of DED and is illegal to store or transport in Manitoba. If elm wood has been marked on a property, the owner must destroy (burn, chip) the wood or take it to an elm wood disposal site (within the two weeks outlined in the letter left by the inspectors). Contact your local municipality for information about elm wood disposal in your area.

### **Elm trees**

Removal of marked trees takes place throughout the year. The trees must be cut close to the ground, and the stumps are not always removed. To learn more about removals in your community, please contact your local municipal or public works office.

If property owners would like to remove marked trees themselves, or if they want to have the tree taken down by someone else, they can do so, but they must contact their local municipality to let them know that the tree has been removed. Regulations regarding the treatment and disposal of this material must still be followed. Associated costs will not be reimbursed.

## **You Can Help**

Urban elms in DED managed communities continue to thrive more than 40 years after DED was first detected in Manitoba. Much of the success of the Dutch Elm Disease and Urban Forest Management Program is a result of public participation and cooperation. To report elm wood, a potentially infested tree, or for more information on the program, please contact the ***Provincial Tree Line*** at 204-945-7866 or [tree.line@gov.mb.ca](mailto:tree.line@gov.mb.ca).