

Alberta Dutch Elm Disease Prevention/Control Measures

The *Plant Protection Act* of Canada regulates the movement of the Dutch elm disease (DED) pathogen. Elms from a DED infected province cannot be shipped to a disease free province. Alberta and British Columbia are classified as DED free.

Under the Alberta *Agricultural Pests Act* (APA), the Dutch elm disease (*Ophiostoma ulmi* and *Ophiostoma nova-ulmi*) and the DED vectors, the native elm bark beetle (*Hylurgopinus rufipes*) and the European elm bark beetle (*Scolytus multistriatus*) are all declared pests. The APA delegates authority to local governments to implement prevention/control programs and provides a means for enforcement.

- Section 5 (2) - An owner or occupant of land or property or the owner or person in control of livestock shall take active measures to
 - (a) prevent the establishment of pests on or in the land, property or livestock unless otherwise authorized by the Minister,
 - (b) control or destroy all pests on or in the land, property or livestock unless otherwise authorized by the Minister, and
 - (c) destroy any crop, vegetation or other matter that contributes or may contribute to the maintenance or spread of a pest on or in the land, property or livestock.
- Section 6 - A local authority of a municipality shall take active measures to
 - (a) prevent the establishment of, or
 - (b) control or destroy, pests in the municipality
- Section 12 – An inspector can specify the measures to be taken and the material, if any, to be used to prevent the establishment of or to control or destroy the pest.

Under this APA the following DED prevention/control measures are legally binding.

The following are responsibilities as per agency:

<u>Management Procedure</u>	<u>Timing</u>	<u>Responsible Agency</u>
Enforce <i>Plant Protection Act</i> of Canada	Continuous	Federal
Enforce Alberta <i>Agricultural Pests Act</i>	Continuous	Municipality/Province
Firewood Confiscation	Continuous	Federal/Province/Municipality
Technical Direction & Information	Continuous	Province/Municipality/STOPDED
Monitoring for Vectors	April 1 to Sept. 30	Municipality/Property owner
Monitoring for DED	Mid-June to Aug. 30	Province/ Municipality/Property owner
Removals - DED infected elm	Continuous	Property owner
Elm Pruning Ban	April 1 to September 30	Province/ Municipality/Property owner
Elm Pruning	October 1 to March 31	Property owner
Site-Specific Inventory	Continuous	Province/Municipality/Property owner
Elm Bark Beetle Control	April 1 to September 30	Municipality/Property owner
Elm Tree Replacements	April to October	Municipality/Property owner
Upgrading Disposal Site	As required	Municipality

Elm Pruning Ban

Elm must not be pruned between April 1 and September 30.

Elm bark beetles (EBB), the vectors of DED, are active between these dates and can be attracted to the scent of fresh tree cuts, possibly infecting a healthy tree.

Preventive Pruning

Pruning elms can only be carried out between October 1 and March 31.

Preventive pruning is the systematic removal of dead, damaged, or diseased branches from healthy elm trees to eliminate breeding material for the EBB's. Keeping elms well-maintained will aid in the control of DED.

Improper pruning techniques and tree topping can weaken the elm tree and increase the risk of attracting EBB's. Tree topping is not an approved pruning method. All pruners should be trained and certified.

To avoid spreading DED, all equipment must be sterilized before pruning a different elm tree. To sterilize your tools, use methal hydrate, a 10% solution of bleach and water, or a 70% concentrate of rubbing alcohol.

The owner of an elm tree shall, to the satisfaction of an inspector, keep the tree pruned so that it is free of wood that is dead or dying.

DED Confirmation

Before any DED suspect tree is removed, the presence of *Ophiostoma ulmi* or *Ophiostoma nova-ulmi*, must be confirmed. All DED suspect elm trees must be sampled properly and the samples sent to a lab approved by the Society to Prevent Dutch Elm Disease (STOPDED) for confirmation testing. Sample instructions can be found on www.stopded.org

DED Infected Elm Tree Removal

When an elm tree has tested positive for DED, the tree must be removed immediately at the bark-soil line and all wood burned or buried. If left standing, other elm trees can become infected. It is also important to promptly remove all other dead and dying elm trees. These trees, regardless of the reason for their poor condition are ideal breeding material for the vectors. Prompt removal of infected trees is an imperative first step in slowing down the spread of DED.

Appropriate Elm Wood Disposal (It is illegal to store elm firewood)

Elm wood cannot be stored, or transported unless en route to the closest elm wood disposal site. All elm wood must be properly disposed of. DED infected wood must be immediately disposed of by either burning or burying to a minimum depth of 30 cm (1 foot). If elm wood is uninfected, another option is chipping (see chipping below). Any material from DED infected elm trees presents a danger of contaminated vectors emerging and spreading the disease to healthy trees. Immediately disposal of the elm wood ensures the destruction of overwintering beetle larval broods and adults.

Care must be taken when transporting a DED positive elm tree to the disposal site. All tree material must be covered and secured, eliminating the chance of contaminating healthy elm trees.

Pest and Nuisance Control Regulation 4(1) A person shall not import, purchase, sell or otherwise dispose of, transport, distribute or plant any infestable item that is infested or any pest without the prior written authorization to do so of a provincial inspector or, if the article is to be kept in Alberta, of a local inspector who is empowered to act in the local jurisdiction where it is to be kept.

Every municipality must designate a disposal site where elm wood may be burned or buried.

Chipping

The complete elm tree diagnosed with DED must be burned or buried. It cannot be chipped.

Elm wood not infected with DED may be chipped into pieces smaller than 3 cm or 1 inch. Larger elm wood chips can harbor the vector. Stock pile the chips for at least one year before using them in a landscape setting. Elm wood chips give off an odor that will attract the vector, therefore must only be used on trails, shrub beds and as animal bedding in areas where elm trees are not growing nearby.

Stump Removal

After the elm tree has been removed, the stump must be destroyed. A freshly cut stump with the bark still intact, gives off the same scent of a dead or dying tree. The remaining stump from a DED infected tree can also produce infected shoots. Remove the stump using a stump grinder to approximately 10 cm (4 inches) below the surface and the hole then be filled with soil.

A copy of the Alberta *Agricultural Pests Act* can be found at:
[http://www1.agric.gov.ab.ca/\\$department/deptdocs.nsf/all/acts6008](http://www1.agric.gov.ab.ca/$department/deptdocs.nsf/all/acts6008)

To report a DED suspect elm tree or for more information, call the STOPDED hotline at 1-877-837-ELMS or check out the web site at www.stopded.org



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