Dutch Elm Disease Isolated detection in Alberta

Detection and response

In July 2020, the City of Lethbridge had two Elm trees with Dutch Elm Disease (DED) like symptoms tested at the Agriculture and Forestry's Alberta Plant Health Lab (APHL). Diagnostic testing revealed the presence of *Ophiostoma novo-ulmi*, a fungal pathogen that causes DED. The Canadian Food Inspection Agency (CFIA) confirmed the detection.

The trees were immediately removed and buried by City of Lethbridge staff. Those staff are actively surveying elms trees for DED symptoms in the area where the diseased elms were found, checking elm bark beetle traps and looking for elm firewood.

This detection is considered an isolated case at this time, and eradication was successful. A collaborative effort between the City of Lethbridge, Agriculture and Forestry, the Society to Prevent Dutch Elm Disease (STOPDED), and CFIA helped ensure a timely response to this pest threat.

Alberta has had one previous detection of DED in the Wainwright in 1998. This tree was also immediately removed and disposed of. Additional monitoring for the beetles, intensive surveillance of elms and checking for elm firewood was done in the town for three years after that incident.



Figure 1: DED-stained Brown Wood

Alberta's DED-free status

Alberta has the largest stand of DED-free elms in North America. In 2017, the provincial American elm inventory was updated and demonstrated that there are at least 600,000 elms growing in Alberta municipalities, rural properties, shelterbelts and provincial parks. These elms are valued at over \$2 billion. Valuations are made according to the standards developed by the Council of Tree and Landscapes (CTLA) and is used by the International Society of Arboriculture (ISA).

Regulatory status

Both pathogens that cause DED, *Ophiostoma ulmi* and *Ophiostoma nova-ulmi*, are regulated under Alberta's Pest and Nuisance Control Regulation, part of the *Agricultural Pests Act* (APA). The European elm bark beetle, *Scolytus multistriatus*, and the Native elm bark beetle, *Hylurgopinus rufipes*, are also both regulated pests.



Both of the pathogens are also regulated under the federal *Plant Protection Act*.

Inspector authority

As part of the APA, municipalities must appoint inspectors. Under Section 10, the local authority of a municipality shall appoint a sufficient number of inspectors to carry out the APA and its regulations within the municipality.

For the purposes of checking trees or elm firewood, Section 17 of the APA stipulates that "land" does not include a private dwelling.

An inspector may, for the purpose of carrying out the inspector's duties:

- Enter at any reasonable hour on any land to inspect the land or any buildings, property or livestock on the land
- Take specimens of a pest or nuisance and of any matter or thing that contains or is suspected of containing a pest or nuisance

Some municipalities have DED bylaws in place. In Alberta, municipalities can appoint bylaw enforcement officers under the authority of section 555 and 556 of the *Municipal Government Act* (MGA). Community peace officers can only enforce provincial acts and regulations, including the APA. A community peace officer is not authorized to enforce municipal bylaws unless they are also appointed under the authority of the MGA, or if the specific bylaw states it can be enforced by a community peace officer working for that municipality.

Reminder: Pruning Ban

Do not prune elms between April 1 and September 30. The beetles are active during this time and will be attracted to the scent of fresh tree cuts, possibly infecting a healthy tree.

Provincial DED prevention and control measures are in place that can be enforced under the APA, which includes the elm pruning ban and not storing elm fire wood.

Additional Resources

Society to Prevent Dutch Elm Disease

Alberta Agriculture and Forestry Services and Information on DED

Agricultural Pests Act

Alberta Pest and Nuisance Control Regulation

For more information, contact:

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For diagnostic support, contact:

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