City of Edmonton 16th Floor, Edmonton Tower 10111 - 104 Street NW Edmonton, AB T5J 0J4



October 8, 2024

Dear Arboricultural Services Provider,

We are reaching out to local arboricultural service providers as you are vital partners in helping to prevent the spread of Dutch elm disease (DED) in the Edmonton area. Your engagement and awareness is essential as we work together to prevent the spread of the disease.

In August of 2024, four trees in the Killarney and Yellowhead Corridor East neighbourhoods were identified to be infected with DED. DED is a fungus that infects elm trees, with infected trees typically dying within a season as the fungus blocks the movement of water within the tree. The current cases appear to have been introduced by the banded elm bark beetle (BEBB), *Scolytus schevyrewi*.

The City of Edmonton, in coordination with the Government of Alberta and the Canadian Food Inspection Agency, has activated an Integrated Pest Management Action Plan to contain the spread of DED. The following are some of the steps taken to date:

- All four infected elms have been removed.
- City-owned elms within root grafting distance of infected trees have been removed.
- A DED Protocol Zone has been established for all elms within 1 km of the infected trees. A map of the current zone is included below. The zone will be adjusted if additional infections are confirmed.

Expectations Within the DED Protocol Zone

- o Intensive surveying and sampling are ongoing.
- o Dead City-owned elms (not infected) were prioritized for removal and have been completed.
- Sanitation and disposal protocols are in place, including:
 - Elm logs and wood chips to be transported to a designated elm disposal facility on the same day as tree work occurs.
 - Residents and contractors should dispose of elm debris at the Edmonton Waste Management Centre at 250 Aurum Road. Notify the Edmonton Waste Management staff that elm debris is being disposed of.
 - Alternative options for disposal of elm debris include burning or burying to a minimum depth of 25 cm.
 - Elm stumps must be removed to a depth of at least 10 cm below grade. If stump removal will not occur at the time of tree removal, the stump must be immediately debarked.
 - Cutting tools must be sterilized before completing tree work on a different elm tree.

Sterilization of truck and chipper must occur if the use of the equipment will be switching from elm removals to live tree work, or if transitioning from elm work inside the DED Protocol Zone to elm pruning outside the zone.

If completing work on private or public elm trees within the DED Protocol Zone, the City asks that you follow the protocols listed above. Additional information about disposal and sterilization, including information for **elm work outside the DED Protocol Zone are provided below.**

Expectations outside of DED Protocol Zone

- Follow all <u>DED prevention and control measures</u>. Note that these measures are enforceable under the <u>Agricultural Pests Act</u>.
- Elm debris from outside of DED Protocol Zones:
 - The City recommends that debris be disposed of in a similar manner as debris from the DED Protocol Zone; however, alternative options include:
 - Elm chips may be stored so long as they are smaller than 5 cm and not used in the landscape for a 1-year period as the scent of the chips will attract the elm bark beetles that are vectors of DED.
 - Elm wood may only be stored if all bark has been removed from the wood or the wood has been treated by kiln drying to a moisture content of 18% or less, or heating it to 56 degrees Celcius for at least 30 minutes.
- Within the Edmonton area, all cutting tools must be sterilized before pruning a different elm tree.
 - To sterilize tools, use methyl hydrate, a 25% solution of bleach and water, or a 70% concentrate of rubbing alcohol. Note that bleach can rust iron- based tools.
- All DED suspect elm trees must be sampled properly and the samples sent to the Alberta government's Plant Health Lab for diagnostic testing. Suspect DED samples are tested at no cost to the sender.
- All suspect elm trees must be reported to the City's Pest Lab by contacting 311.

What to watch for in elm trees:

- Wilting yellow leaves early in the summer (flagging), or die back rapidly. The leaves may turn brown and die, and stay on the branches (Figure 2). It is common to see some small patches of flagging in any elm, but if this develops suddenly and before fall, it can be a symptom of DED.
- Dark staining under the bark (Figure 3).
- Feeding galleries near twig crotches or under the bark (Figure 4), or 2mm wide, perfectly round emergence holes (Figure 5) which could be red elm weevil or banded elm bark beetle.

The Dutch elm disease can occur in both American and Siberian elms. It may progress more slowly in Siberian elms, so it's important that we catch these cases early. Siberian elm is the preferred host of BEBB.

Finally, it is more important than ever to adhere to the annual elm pruning ban. In Alberta it is illegal to prune elms between April and September. Always prune dead and dying elm branches from October to March. **All elm wood must be disposed of immediately** by burning it or taking it to the <u>Edmonton Waste</u>

<u>Management Centre</u> (EWMC) at 250 Aurum Road for free, safe disposal. Remember to tell the scale operator that you have elm wood. **Disposal is free for residents. Regular rates apply for commercial elm disposal.**

The City thanks you for your support in helping to prevent the spread of DED. For more information, please visit:

- edmonton.ca/dutchelm
- <u>alberta.ca/dutch-elm-disease-prevention-what-you-can-do</u>
- Canadian Food Inspection Agency (CFIA) Dutch elm disease Information

Sincerely,

Melissa Campbell

Supervisor Urban Forestry Parks and Roads Services 780-554-3317 melissa.campbell@.edmonton.ca

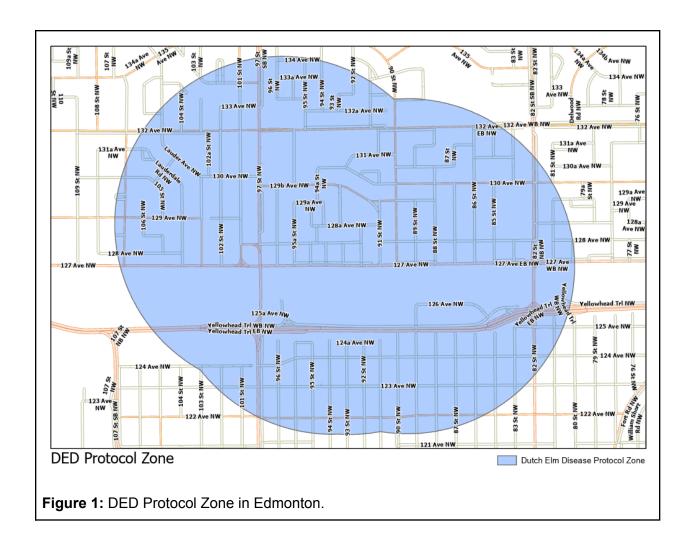




Figure 2: American elm tree with DED showing flagging and retained, dry leaves.



Figure 3: DED positive american elm branch in cross-section with staining under the bark.



Figure 4: Banded elm bark beetle galleries under the bark of an American elm tree.



Figure 5: Banded elm bark beetle emergence holes in American elm.