

STANDARD OPERATING  
PROCEDURE

# DUTCH ELM DISEASE

March 2024

0800 WAIPADC (924 723)  
[waipadc.govt.nz](http://waipadc.govt.nz)

## 1. PURPOSE

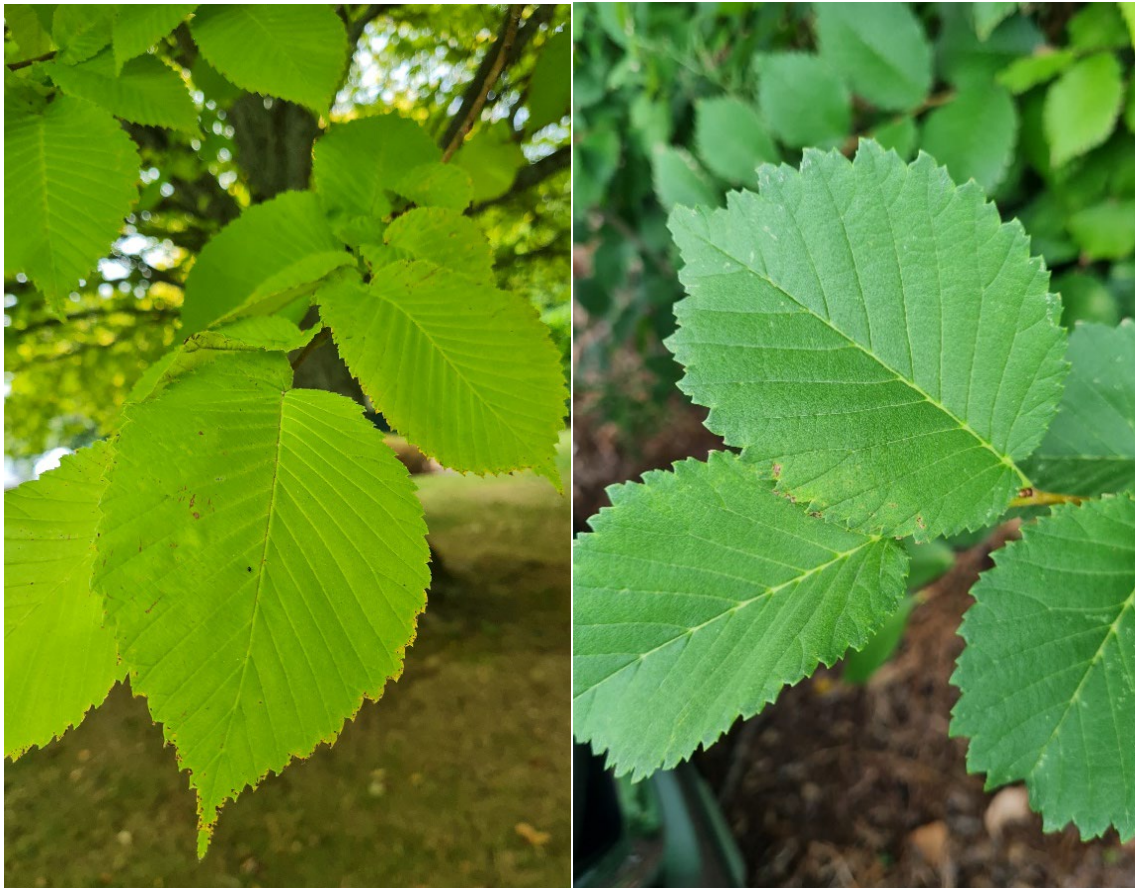
The purpose of this document is to ensure that Arboricultural companies and the wider public are familiar with the proper removal and disposal of Elm (*Ulmus spp.*) material when working with infected Elm trees. This is vital to effectively control the spread of Dutch Elm Disease (DED).

## 2. SCOPE

This procedure covers the sanitation and control measures of DED to prevent its spread throughout the Waipā District.

## 3. IDENTIFICATION

Elm trees can be identified by their leaves, which are alternate, single, and serrated along the edges, with noticeable asymmetrical bases. The leaves are paper thin, often rough like sandpaper, and deciduous. The twigs are slender with an alternate branching pattern. The most common in Waipā; Golden Elms are noticeable by their bright yellow foliage.



DED is an Elm specific fungal pathogen (*Ophiostoma novo-ulmi*) which is spread by bark beetles (*Scolytus multistriatus*) and can also be spread between trees through root grafting, or infected pruning equipment.



After ensuring the tree has been correctly identified as an Elm, check the following:

1. Are there visible signs and/or symptoms of the disease?

- Branch flagging
- Leaf wilt with yellowing and then brown, curled, dead leaves.
- Reddish-brown staining of the cambium beneath intact bark or visible in the cross section of cut branches/twigs on outer growth ring.
- Beetle galleries visible beneath removed bark.

2. If the tree is standing dead, look for signs such as:

- Loose shedding bark
- Vertical insect larval galleries of the bark beetle on the sapwood
- Small circular bore holes through the bark.

3. Dutch Elm Disease is a notifiable organism under the Biosecurity Act 1993. Report with photos, steps taken and location to [DED@waipadc.govt.nz](mailto:DED@waipadc.govt.nz) and notify Ministry of Primary Industries exotic pest and disease hotline 0800 80 99 66 if signs and symptoms have been identified.

#### Examples of infected Elm tree with DED



#### 4. BIOSECURITY MEASURES

If a tree is suspected to be infected with DED, every effort must be made to limit the spread of the disease. Diseased tree removal must be done as soon as possible to prevent further spread of contaminated bark beetles.

The purpose of sanitation is to remove Elm bark beetle (*Scolytus multistriatus*) breeding sites and sources of the pathogenic fungus. High risk activities include specialist or targeted operations that may involve contact with the infected material.

##### Sanitation process within the Waipā District:

- When working on Elm trees, treat all Elm mulch or debris as if infected with DED and do not move more than 500m from site.
- Do not distribute, move, or release DED within the Waipā District.
- Do not move any untreated DED infected plant material within the Waipā District.
- Destroy all Elm plants on site if they are infected with DED, and you are directed to do so by biosecurity advisors or council staff, and with landowner approval.
- Mulch, burn, or bury all parts of any Elm you have been instructed to destroy on site. Where possible, you must not move mulch further than 500m from the site of the offending tree for at least three months after chipping. Do not store Elm logs for firewood or other purposes.
- Do not move diseased Elm material from the infection site until the disposal procedure has been recorded, understood, and agreed to by Waipā District Council.
- Mulch from diseased council trees left in public spaces will be secured with signage to prevent inadvertent movement by public or council staff.
- Clean all machinery or other equipment used in connection with infected Elm material with one of the following disinfectants before moving machinery, or equipment off-site:
  - Sterigene - a non-toxic broad-spectrum disinfectant used to sterilise equipment and machinery prior to and post contact. Active against fungi, bacteria, and viruses,
  - 5% bleach,
  - or 80% ethanol or methylated spirits.
- Remove bark from any remaining Elm stumps to below ground level. Any remaining stump must also be poisoned to prevent regrowth of suckers.
- Prune Elm trees while the trees and beetles are in dormancy, during winter months.

#### 5. PUBLIC EDUCATION

Members of the public who own Elm trees should be aware of the following:

- The signs and symptoms of the disease – provide relevant link to council DED web page with information for public: [waipadc.govt.nz/dutchelmdisease](http://waipadc.govt.nz/dutchelmdisease).
- Inform owners of Elm trees that transporting any Elm wood as firewood is a serious biosecurity risk
- We recommend to avoid planting Elms. Nurseries have been banned from propagating them in Auckland, the ban is not in place in the Waikato. However, this will be monitored overtime.



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