

# Dutch Elm Disease Surveying

## Outward Symptoms

A complete section of the crown is dead or rapidly dying.

Leaf loss and discolouration will occur from the bottom of the infected branch upwards rather than from the tips of the branches downwards.

The infected section of the crown is essentially ring-barked, cutting off all water and nutrients to the leaves:

In July/August the visual signs are once healthy looking leaves turn yellow, with complete branches having leaves hanging downwards like flags.



Left: section of crown defoliated. Right: early defoliation, flagging in upper right branches

In late August/September when Elms are naturally beginning to turn for Autumn the DED effected leaves will appear shrivelled compared to the rest of the crown.



Cont'd...

## **Confirmation**

To confirm the disease a twig sample will need to be taken and inspected for mycelium.

Using a high pruner cut a sample of the effected twigs (around 1-2m long if possible).

With a knife carefully peel away the bark and phloem from a section of the twig (you may need to clean off slithers of phloem with your fingernails) inspect the stem for purple/brown longitudinal staining of the xylem.

Check for staining along intervals of the sample twig. Care needs to be taken, some samples only have several cm of staining along 1 metre of twig.

Heat treat the pruners and knife with a lighter or similar in between samples to guard against cross infection.

***See the attached images for positive and negative twig samples***

If a sample is **confirmed as positive** record the name & address of landowner (if known) and 8 figure grid reference of street/road name.

***Please send all confirmation to:***

***Forestry Team  
Planning & Development  
Highland Council  
Glenurquhart Road  
IV3 5NX***

***END.***