



Chestnut Blight Biosecurity update

February 2024 Field Day
Trevor Ranford and Elke Jasper



summary

- People need to regularly survey their own property and look for changes and symptoms of blight.
- Send their own surveillance data to IBO.
- Surveying future properties.
 - Last opportunity to learn about Blight and hygiene measures -to be trained in the field
- Remove infections as soon as possible, that means remove entire tree and burn
- Maintain hygiene practices to prevent disease spread throughout your orchards

Through surveillance, engagement, support & education we hope to manage the blight threat to our chestnut orchards



Introduction

Update on surveys - July 21

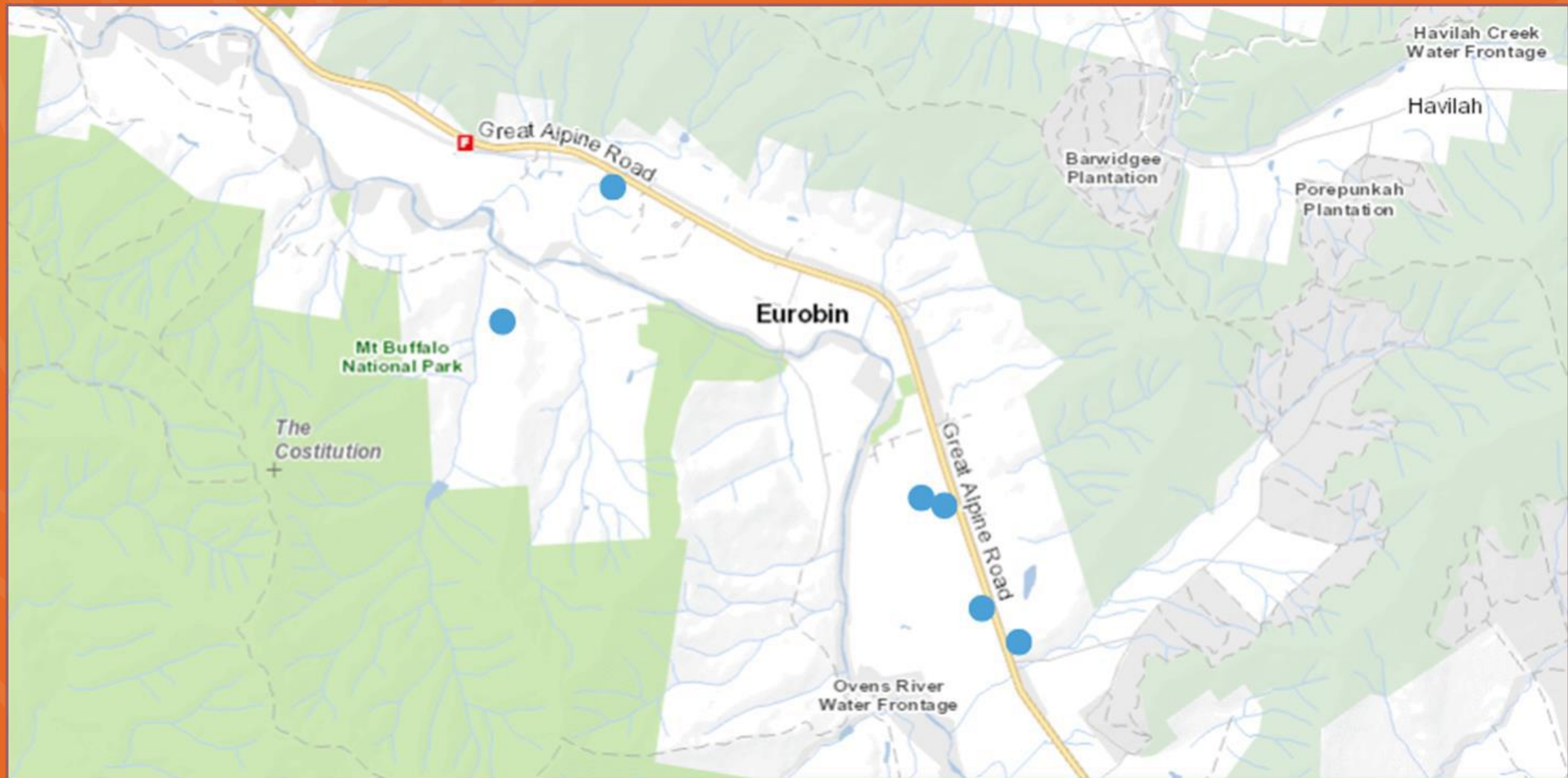
- 151,000 trees have been surveyed
- Delineate areas :-present/absent
Smoko, Freeburg, Germantown, Buckland, Porepunkah, Buckland Valley, Havilah, Rosewhite, Stanley, Beechworth, Murmungee and Gapsted and Batlow.
- Working toward completing Myrtleford, Buffalo River and Tawonga
- Working on regular surveys for new IPS and annually older IPS

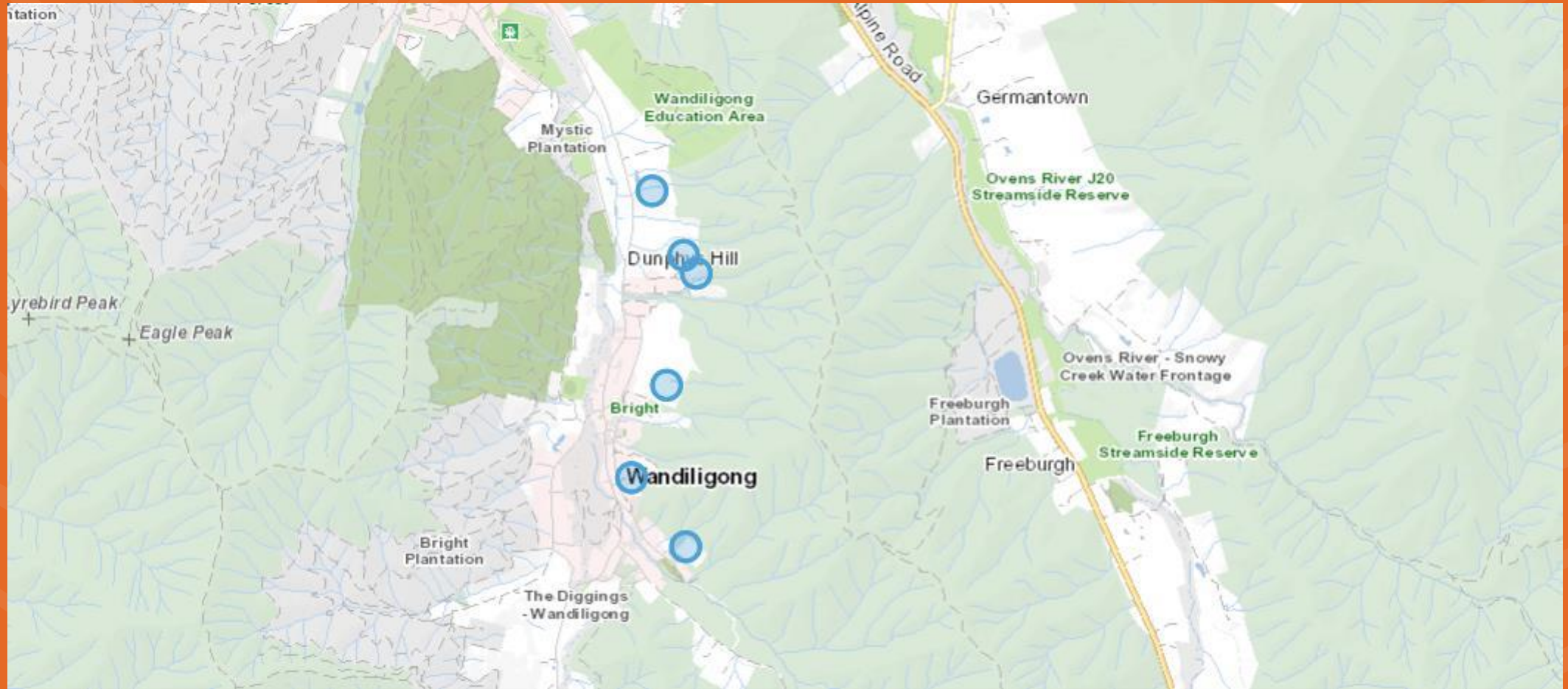




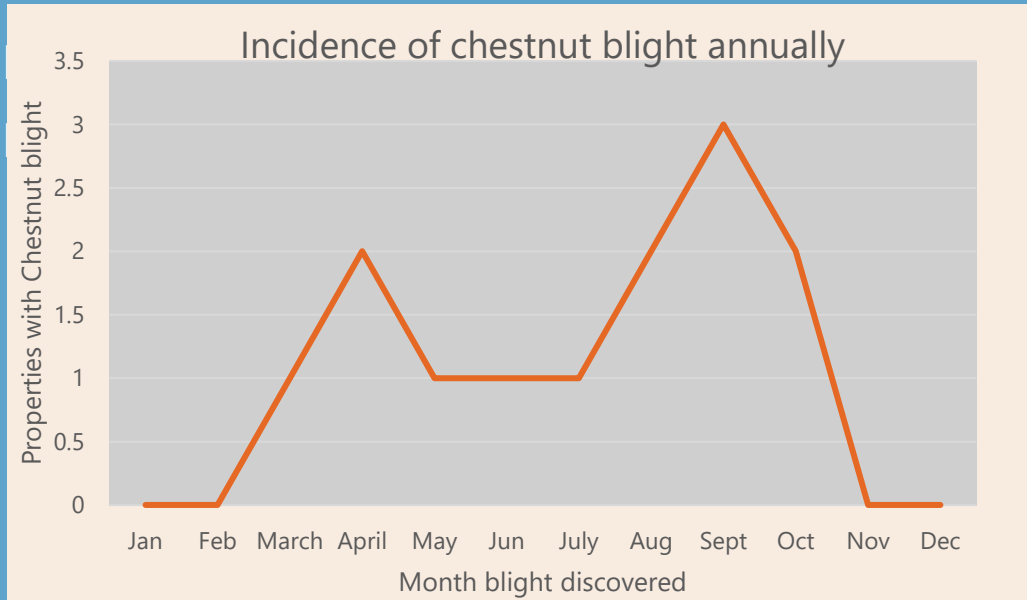
Infected properties

- Only Wandiligong, Eurobin and Buffalo River have infected properties
 - 15 samples were positive for Chestnut Blight (*Cryphonectria parasitica*).
 - 13 properties infected, some with multiple infections over time within the orchard areas
- Recently infected property in Buffalo River - old infections.





Time of the year

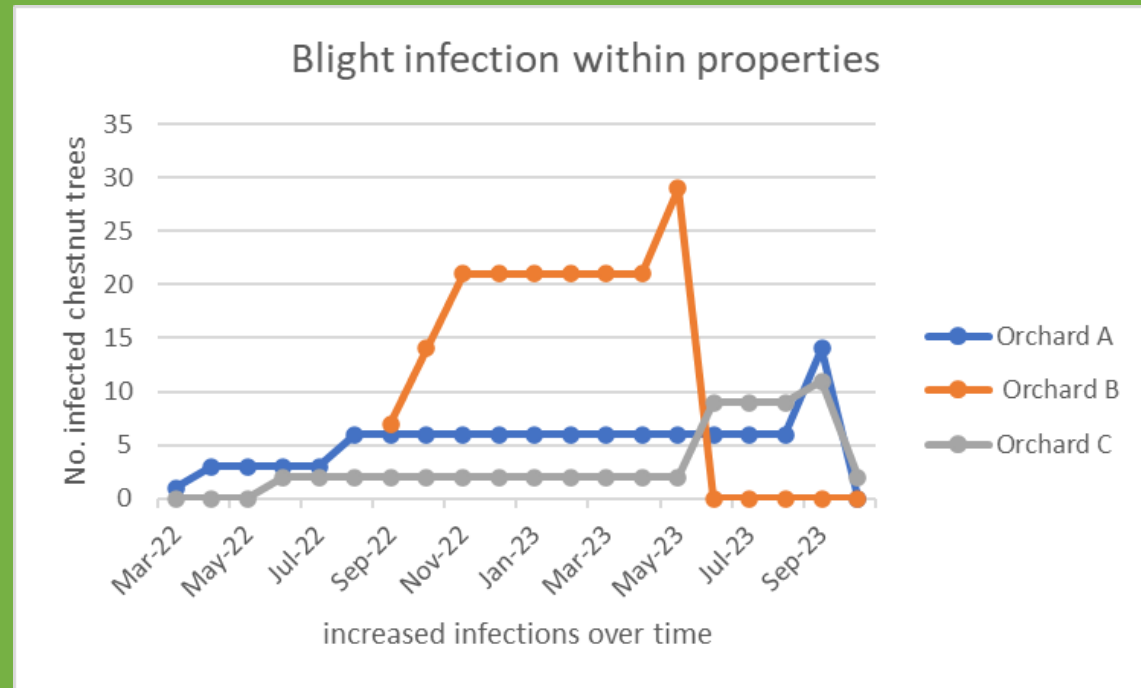


SELF SURVEY:

- Essentially growers undertake their own inspections. CAI can only do a certain amount of orchard inspections.
- The focus of self surveys should be continuous throughout the year.
- On completion of self surveys return your form to the Chestnut IBO (the information will be kept confidential)



The more spore load.....



We have surveyed high and low
through, thick and thin to find **Chestnut**
blight !



Blight – Recap

close up how different it can look. As you remember!



Recent



SYMPTOMS- what to look for!

INFECTED TREE



MYCELIUM FANS



STROMA & LESIONS

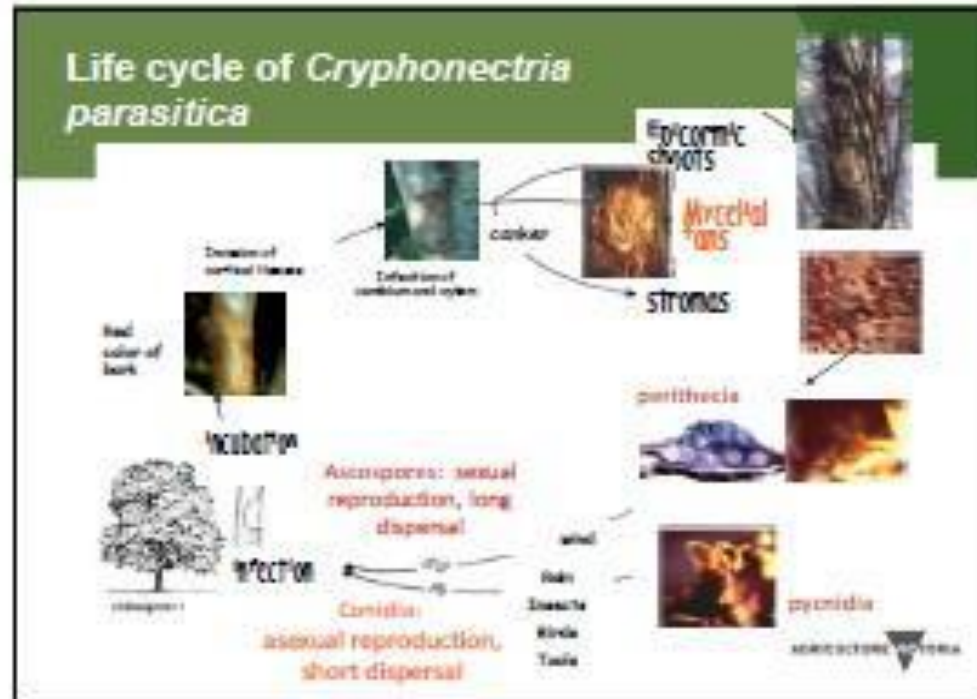


Cryphonectria parasitica (Murrill) Barr

- Taxonomic position: Fungi: Ascomycetes: Diaporthales
- Disease common names: Chestnut blight or canker



Super spreader event – sexual phase



Symptoms

- Masses of yellow-orange to reddish-brown pustules on infected bark, tendrils of spores in humid weather.
- Cankers found on stems and branches can be:
 - Diffuse, rapid girdling of stem.
 - Sunken cankers on stem and branches where wood material has died.
 - Bright brown to red patches on young branches and epicormics.
 - Swelling and bark cracking around branch unions.
- Under the bark pale-brown fans of mycelium can be observed.
- Death above the canker – blighted leaves.
- Can be confused with the *Phytophthora* pathogen, where dead tissue occurs from ground level, where as blight has healthy tissue below cankers.

AGRICULTURE AUSTRALIA



Dave Smith

Hygiene on farm- tree removal

- Survey trees regularly for any changes
- Remove dead dying limbs/trees
- Suspect tree infection- sample
- Inform pruners and employees
- Wrapped/cover tree or pruning's.
- Remove infected tree and roots as soon as possible- to reduce spore load.
- Hygiene kit – equipment use- methylated spirits/water solution & you wash clothing, boots and anything you carry.



2023



Blight infection



Chestnut Blight



14

Hygiene in the orchard – checking wood heaps, removal of dead and dying trees



Infected Wood pile



- Infected tree-branches on ground
- owner unaware

BURN



Removal of infected Chestnut trees

- CAI is working with property owners to remove blight-infected trees,
- 7 IPs are cleared at the moment, while the remainder progressing toward removal.
- Pulling up entire infected chestnut tree.
- Growers need to assist with the process.



Trees uprooted and burnt insitu



Ready to burn





Problem - the big wood and stumps did not burn

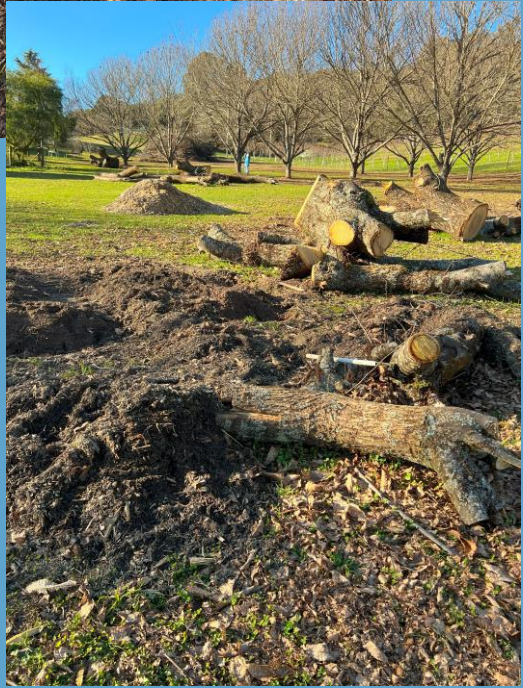


Subject to high heat until complete burning is possible





Clean up as soon as possible and burn, if not possible cover.



Older stumps - infected



- Best ways to control blight is to be proactive –
 - * inspect,
 - * sample,
 - * remove,
 - * burn.
- Through early and complete removal of infected trees you can prevent spread.



Infected properties-

very steep terrain unable to remove entire trees

owner has burnt to ground level

all plant material raked and burnt inset

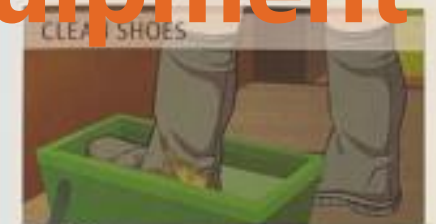
tree roots remain – monitor 2 years

In this case!



Clean tools and equipment

Hygiene kit



summary

- Surveys have and will delineate blight infected areas
- People need to survey their own property and look for changes.
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Questions

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