

PRELIMINARY GLOSSARY OF DIEBACK TERMS1. Dieback Symptoms :

Deaths of indicator species in a location and/or pattern strongly suggestive of presence of *Phytophthora cinnamomi*.

2. Dieback:

(also "Dieback forest"): Forest in which dieback symptoms are present.

- 2.1 Proven Dieback: forest where deaths of indicator species are associated with recovery of *Phytophthora cinnamomi*.

(This replaces: known dieback, certain dieback.)

- 2.2 Suspect: forest in which the evidence for dieback presence or absence, is inconclusive.

(This replaces: possible infected forest, likely dieback, questionable dieback, doubtful dieback, assumed dieback, probable dieback.)

- 2.3 Incipient Dieback: forest in which *Phytophthora cinnamomi* is present or suspected, but dieback symptoms are yet to appear

(This replaces: unexpressed dieback, latent dieback.)

- 2.4 Uninterpretable for Dieback: forest in which susceptible plants are absent or too few to enable interpretation for dieback presence or absence.

- 2.5 Interpreted Risk: forest in which inoculum is potentially present due to a proven D'b occurrence higher in the topography, but due to site factors is otherwise uninterpretable for dieback presence or absence.

3. Infection:

The presence of *Phytophthora cinnamomi* in a particular locality, as revealed either by recovery of the fungus and/or development of dieback symptoms.

4. Dieback-Free Forest:

Forest apparently free of dieback.

(This replaces: unaffected forest, green forest, clean forest, healthy forest, non-infected forest, uninfected forest.)

5. Dieback-tolerant Forest:

Forest in which site factors and/or species combine so that tree deaths will not occur if *Phytophthora cinnamomi* is introduced.

Note: (i) lack of deaths does not infer no effects,
(ii) a dieback tolerant forest can have a susceptible understorey.

(This term replaces: Resistant forest, non-susceptible forest, low impact forest, stands not predisposed to dieback, low risk forest.)

Lexicon

Lecture Notes

Sample Procedure

Blank Field Sheets

Sample Results

6. Dieback Spread:

An increase in the area of forest in which dieback symptoms occur.

6.1 Natural Dieback Spread: the growth of the fungus through the soil, or its dissemination by natural agencies such as gravity of water.

6.2 Artificial Dieback Spread: transport of the pathogen by man or animals, into dieback-free forest. This can involve expanding the area of existing infection, and/or the creation of new infections at a point or points removed from the original source of infected material.

These Terms Replace: the expressions "intensification and "extensification" as they were applied to spread.

7. Dieback Intensification:

The build-up of fungal activity in a locality, leading to decline and death of susceptible species.

7.1 Terminal Expression: the end-point of intensification of the disease at a particular site. Can range widely from death of single understorey species to "graveyard".

7.2 "Graveyard": where P.C. has caused death of most plant species in a community.

8. Dieback Susceptibility:

An expression of the ease and rapidity with which the pathogen is able to bring about the decline and death of species in the forest.

Note: strictly speaking, susceptibility refers only to species, and not to sites.

9. Dieback Hazard:

An expression of the degree to which site factors combine to favour infection by the fungus and intensification of the disease.

10. Dieback Risk:

The likelihood of *Phytophthora cinnamomi* introduction by either natural or artificial spread.

Can therefore have: Natural dieback risk or artificial dieback risk (see definitions 6.1 and 6.2)

11. Biological Impact:

The implication of the disease to the plant and animal communities of the forest.

12. Management Implications:

The implication of the disease to forest management and land use.

13. Site Sensitivity to Dieback:

An expression which combines the degree to which a site/species combination favours infection and intensification (hazard), the likelihood of infection (risk) and disease effects (biological and management implications).

14. Safe Road:

A road on which it is not possible for a given machine or vehicle to pick up and transport *Phytophthora cinnamomi*.

14.1 Unsafe Road: a road on which it is possible that *Phytophthora cinnamomi* can be picked up and transported.

Note: any definition of roads or access must be qualified by further definition of such factors as surface, season/weather and type of unit using it.

15. Protectable Forest:

Dieback-free forest upslope from dieback or suspect dieback infection.

In protectable forest the risk of natural dieback spread is considered to be nil or low.

16. Non - Protectable Forest:

Forest downslope from dieback or suspect dieback infection in which the risk of natural dieback spread is high.

Note: The expressions "protectable" and non-protectable" refer only to risks from natural spread of the fungus. They imply nothing about disease impacts or rate of disease intensification.