DIEBACK TERMINOLOGY

dieback:

the progressive dying, from the top downward,

of twigs, branches or tree crowns.

dieback disease:

in Western Australia, particularly applied to the effects of the root rot fungus Phytophthora cinnamomi.

dieback sýmptoms:

deaths of indicator species in a location and/or pattern strongly suggesting the presence of Phytophthora cinnamomi.

dieback forest:

forest in which dieback symptoms are present.

dieback disease susceptibility:

the ease and rapidity with which the pathogen is able to bring about the decline and death of a species.

dieback disease hazard:

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

dieback disease intensification:

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

dieback disease
risk:

the likelihood of introduction of <u>Phytophthora</u> <u>cinnamomi</u> to a locality by either natural or artificial spread.

diebackfree forest: forest apparently free of infection.

dieback-tolerant forest:

forest in which site factors and/or species combine so that tree deaths will not occur if dieback disease is introduced. Note that lack of tree deaths does not infer no effects, either on the tree or on the understorey.

dieback resistant host:

a host plant which actively inhibits invasion by Phytophthora cinnamomi (P.C.)

host:

dieback susceptible a host plant which allows total invasion by P.C., resulting in high host mortality.

dieback tolerant host:

a host plant which permits total invasion by P.C. but shows a low degree of mortality.

dieback variable host:

a host plant which permits invasion by P.C., but can retard invasion under certain conditions, with variable mortality of the host.

deletí?

fungus:

one of the lower forms of plant life, that lacking chlorophyll and being incapable of manufacturing its own ford, derives its energy from dead or living plant or animal matter.

hyphae:

segments or threads of the mycelium of a fungus.

incipient dieback disease:

forest in which Phytophthora cinnamomi is present or suspected, but dieback symptoms are yet to appear.

infect:

to establish a pathogenic relationship with a host plant.

infection:

the presence of <u>Phytophthora cinnamomi</u> or some other disease in a particular locality as revealed either by positive identification of the fungus or development of characteristic disease symptoms.

indicator plant:

any plant, which by its presence or abundance indicates a quality of the site.

In disease management in W.A., <u>dieback indicator</u> species: dieback susceptible host plants whose mortality in certain patterns or on certain sites indicate a high probability of the presence of P.C.

intensification
of dieback:

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

terminal expression:

the end-point of intensification of the disease at a particular site. Can range from no apparent effect to death of single understorey species to "advanced dieback".

advanced dieback:

where the terminal expression is widescale mortality of jarrah trees and most other susceptible species on the site.

inoculum:

portions of any pathogen capable of being diseminated and of initiating disease.

inoculum density:

number of propagules having a certain amount of virulence per unit of carrying substance, e.g., per gm dry weight of soil.

inoculum potential: the inoculum density as modified by environmental factors.

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impact biological:

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

impact
management:

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

pathogen:

a living entity capable of causing disease.

propagule:

any vegetative or reproductive part of a plant capable of being diseminated and of propagating the species.

able protective forest:

diebackfree forest upslope of dieback forest.

(non protectable
 forest:

diebackfree forest downslope of dieback forest).

Resistance:

the inherent capacity of a plant to prevent or restrict the entry of subsequent activities of a pathogen when the plant is exposed to inoculum under environmental conditions suitable for infection.

resting spore:

a spore, usually thick-walked, that can remain alive in a dormant condition for considerable periods of time.

safe (road):

a road on which is is not possible for a machine or vehicle to pick up and transport propagules of P.C.

sporangium:

a plant organ, usually with a spherical wall, capable of producing asexual spores.

sporulation:

the processing production of spores in fungi and lower plants.

spore:

a single to many-celled reproductive body in the fungi and lower plants which can develop a new plant.

suspect:

(in dieback mapping): forest in which the evidence for dieback presence or absence is inconclusive.

susceptibility
(plant):

capacity of a plant to become infected by a pathogen or to be affected by a disease.

tolerance:

- the capacity of a tree to develop and grow in the shade of, and in competition with, other trees.
- the capacity to withstand other factors,
 e.g. frost tolerance, disease tolerance,
 drought tolerance.

zoo_spore:

a mobile asexual spore of an algae or fungi.

dieback spread:

- an increase in the area of dieback forest.
- 1. Natural Dieback Spread: the growth of the fungus through the woil, or its dissemination by natural agencies such as gravity of water.
- 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.

dieback hygiene:

management practices aimed at preventing the pickup and transport of P.C. propagules from dieback dibratifications.

dieback status
(of a forest):

whether or not infected by dieback and the degree of intensification.

dieback risk category:

forest classified according to the risk of present or future dieback infection. (Common risk categories are: diebackfree protectable forest, diebackfree non-protectable forest, suspect forest).

stockpiling:

assembling logs into dumps during dry soil conditions so as to obviate the need for log snigging and hauling when the soil and roads are wet.

uninterpretable forest:

(in mapping): forest in which the presence or absence of dieback cannot be determined from visual inspection, usually due to absence of dieback indicator species.

quarantine:

(in disease management in W.A.): the control of access in an area for a sufficient period to enable dieback symptoms to become apparent and to be observed and mapped.

coupe:

a discrete felling area.

sub-coupe:

portion of a coupe - in disease management a sub-coupe is a "micro-catchment" servicing one landing.

where

split-phase
logging:

a logging system when felling and snigging to a landing is completed before log loading and hauling commences.

washdown
(also cleandown):

cleansing an item of equipment, plant or a vehicle of all soil and debris likely to be contaminated with P.C.