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"How is Phytophthora Dieback spread?"

Phytophthora Dieback spreads via the movement of spores through wet soil and from plant to plant through their root systems. Human activity in infested areas is the main method by which diseased soil is moved from place to place. It can be spread by movement of infested gravel, road construction, animals and off-road vehicles. The risk of spread is greatest during spring and autumn. Phytophthora Dieback can be easily introduced into your garden through the use of non-composted mulch, infested potting mix or soil, and infected nursery plants.

...although there are effective treatments to slow the spread of Phytophthora Dieback, there is no known method to eradicate the pathogen.



...spread is greatest during spring and autumn.

"What is Phytophthora Dieback?"



Phytophthora Dieback is a common and devastating plant disease in native plant communities in the south-west of Western Australia. Phytophthora means "plant destroyer". The first unexplained death

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of jarrah trees was recorded in the early 1920s near Karragullen. However, it was only in the mid 1960s that Phytophthora cinnamomi was identified as the cause of the deaths. It's believed the disease was introduced to Western Australia in cultivated plants brought in with the first settlers.



...over 2300 (40%) native plant species are at risk

Phytophthora Dieback threatens to have a devastating impact on over 2300 (40%) of different plant species in Western Australia. Once the pathogen infects the roots, the plant may begin to show symptoms of 'dying back'. However, for many species 'sudden death' is a better description.

The spread of Phytophthora Dieback in native vegetation is a biological disaster of global significance for areas with important conservation and biodiversity value and a major problem for extractive industries. It is a significant threat to horticulture, nurseries, domestic gardens, nature recreation and tourism based industries. Phytophthora Dieback also impacts native fauna species through loss of habitat and food sources.

Information & Advice

Dieback Working Group

C/- Shire of Kalamunda, PO Box 42, Kalamunda WA 6926 Phone: 08 9257 9937 Fax: 08 9259 9991 Mob: 0438 044 488 www.dwg.org.au

Roleystone Dieback Action Group

C/- Roleystone Family Centre, 19 Wygonda Road, Roleystone WA 6111 - Phone: 08 9397 6813

Department of Conservation and Land Management www.calm.wa.gov.au

Centre for Phytophthora Science and Management

Murdoch University, South Street, Murdoch WA 6150 Phone: 08 9360 6272 Fax: 08 9360 6303 www.cpsm.murdoch.edu.au

PHYTOPHTHORA DIEBACK MAPPING & MANAGEMENT

Glevan Dieback Consulting Services

Evan Brown - Phone: 08 9582 7772

Department of Conservation and Land Management Swan Region, Abe van de Sande - Phone: 08 9368 4399

Department of Conservation and Land Management

Vegetation Health Service - Phone: 08 9334 0333

PHOSPHITE PROTECTION AND TREATMENT

Dieback Treatment Services

Glenn Tuffnell - Phone: 1300 785 311

For further information contact your local government authority or local community conservation group.





















Additional funding provided by the Conservation Commission, Western Australia







"Dieback, what can I do?"



There's plenty we can all do, it's just a matter of being informed and pro-active.

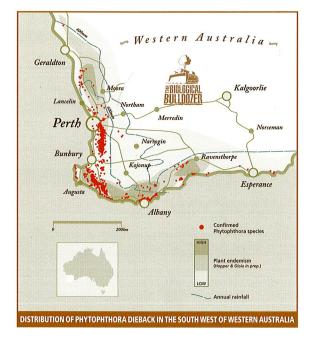
The Southwest community has to be aware of where Phytophthora Dieback is in their area. The spread of the disease can be minimised by asking for Dieback-free plants, gravel, potting mix, mulch and soil at your local nursery or garden centre.

Community members keen to get involved in protecting their local bushland areas should work with their local government authority, catchment group or community conservation group.

....phytophthora means "plant destroyer".

"Where is Phytophthora Dieback in Western Australia?"

The higher rainfall areas, greater than 600mm, in the south west of Western Australia are the most affected. In the past, Phytophthora Dieback was commonly thought to only affect the jarrah forest, but this is a common misconception. Phytophthora Dieback is invading many native plant communities, including banksia woodlands, jarrah forest and coastal heathlands from Eneabba in the north to Cape Arid in the east.



Phytophthora Dieback is found in suburban gardens, landscaped areas, golf courses, plant nurseries with poor hygiene practices, horticultural plantations and bushland. It kills a range of plants including roses, azaleas, proteas, fruit trees and native plants.

The Southwest Botanical Province has more than 5700 plant species and 2300 of those could be killed by Phytophthora Dieback.

This means 40% of our native plant species are under threat.

...although there are effective treatments to slow the spread of Phytophthora Dieback, there is no known method to eradicate the pathogen.

"Managing Phytophthora <u>Dieback?"</u>

First we need to know where Phytophthora Dieback is and where it isn't! Although there are widespread areas that are infested with the disease there are still significant areas currently free of disease. Although there are effective treatments to slow the spread of Phytophthora Dieback there is no known method to eradicate the pathogen.



There are a range of practices that can minimise the spread of Phytophthora Dieback or minimise the impact of the disease. These practices include: restricting access to uninfested areas, use of signage, cleaning vehicles and boots before entering healthy sites, scheduling activities for dry soil conditions, controlling drainage, use of dieback-free soil and plants and the use of Phosphite.

Purchasing nursery products

Phytophthora Dieback in the soil of a single pot has the potential to affect your entire garden. Before purchasing any plants, garden mix or mulch, ask your nursery if they are an accredited nursery with the Nursery Industry Accreditation Scheme Australia (NIASA) or if they have appropriate Dieback preventative and management hygiene controls. Always ask if the soil, gravel or potting mix is 'Dieback-free'.



The use of Phosphite

Phosphite is a cheap, environmentally friendly fungicide used to fight Phytophthora Dieback. Phosphite has proven to be an effective dieback treatment. Research has shown that it increases the resistance of susceptible plants to Phytophthora Dieback. Tree injection will offer protection for four years and for spraying - up to two years.

To learn how to treat your plants with Phosphite we recommend that you attend one of the regular field days held by the Dieback Working Group. It is also an opportunity to ask questions about Phytophthora Dieback, its prevention and its treatment.



...always ask if the soil, gravel or potting mix is 'dieback-free'.