

# Stop Dieback



## Feral Pigs Spread Phytophthora Dieback

Feral pigs have long been implicated as vectors in the spread of the plant pathogen *Phytophthora cinnamomi*. The wallowing and rooting activities of feral pigs predispose them to the transport of infested soil. These activities not only disturb the soil structure but also reduce leaf litter and vegetation cover which can lead to an increased susceptibility of an area to colonisation with *P. cinnamomi*. The use of rub and tusk trees by feral pigs may also represent an avenue of pathogen spread, as damage to the cambium layer could potentially result in the direct introduction of *P. cinnamomi* to the plant's vascular tissue. Additionally, the non-fastidious diet which most feral pigs enjoy could lead to the dissemination of infected plant material through their digestive system. However, there is very little evidence to support these ideas.

Current research at Murdoch University's School of Veterinary Science in collaboration with the Centre for *Phytophthora* Science and Management (CPSM) is investigating these avenues with the aim of determining the true risk feral pigs pose to the spread of *P. cinnamomi*. Replicated feeding trials using *P. cinnamomi* inoculated millet seeds have shown that the pathogen can survive passage through the pig gut. By plating the recovered millet seeds onto *P. cinnamomi* selective media we have demonstrated the survival of the pathogen through the gut and the potential for further infection. Further investigation is underway to detect the occurrence of *P. cinnamomi* in soil collected from the hooves and bodies of feral pigs trapped in forests throughout the southwest of the state. Sampling of soil from rub and tusk trees is also being undertaken along with monitoring of the health of those plants for any signs of infection.

The study is also investigating the home range of pigs within the forest and potential distances over which spread is likely to occur. These studies have shown that some boars travel up to 19 km in a 24 hour period. Whilst much of this work is still being undertaken, pieces of the puzzle are slowly starting to be pieced together indicating that management of feral pig populations is an important component of *Phytophthora* Dieback management.  
By Andrew Li.



Feral Pig wallow near Dwellingup. These muddy disturbed areas may spread *Phytophthora* Dieback.

The Discovering Dieback Education Kit is an award winning, 10 week integrated term theme for upper primary school. To obtain a free copy please contact Libby Burgess on [mail@dwg.org.au](mailto:mail@dwg.org.au) or go to [www.dwg.org.au](http://www.dwg.org.au) to download a copy

# Project Dieback Update.

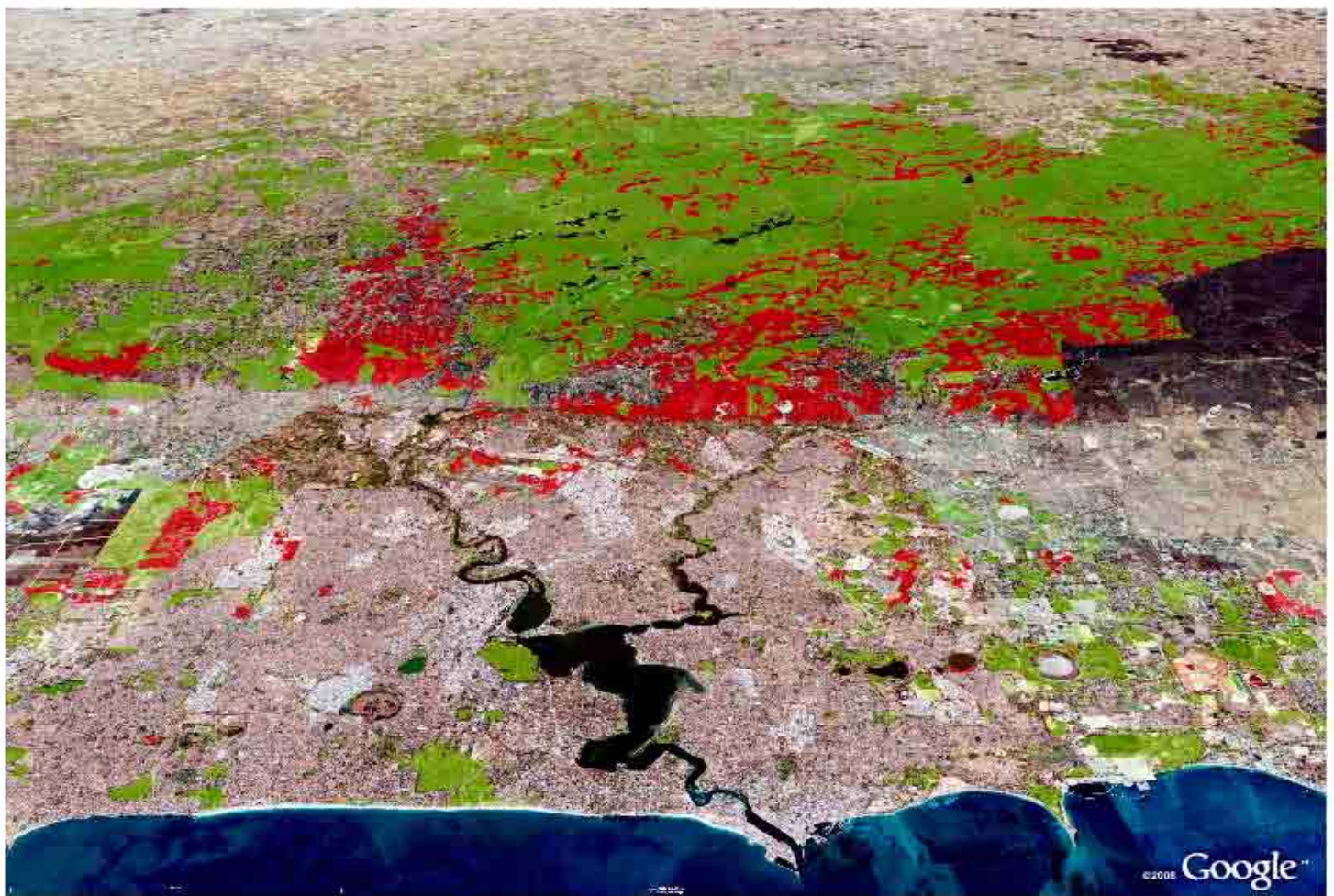
The Project Dieback team presented and launched their latest project product, a poster showing the extent of *Phytophthora cinnamomi* infestation across the South West to the Dieback Consultative Council at their March meeting marking the completion of the whole of South West occurrence mapping of Phytophthora Dieback. The Project Dieback team hopes that the strategic mapping will be an important resource for community, industry and government, helping them to be more aware of the extent of Phytophthora Dieback and the threat it poses to biodiversity across the South West.

The mapping included all remnant vegetation across all land tenures receiving more than an average of 400mm of rainfall a year. It was done under contract by the Forest Management Branch of the Department of Environment and Conservation, with contributions of operational mapping coming from DWG, private dieback interpreters, industries, utilities, Local Governments and Friends of Groups. Larger areas not previously mapped, were assessed for the likelihood of being either dieback free or dieback infested using aerial photographs and also the local knowledge of experienced interpreters. Areas have subsequently been colour coded with regard to their likely dieback status.

Program Manger Joanna Young has stressed that it is important to recognise and protect areas that are still disease free but also acknowledges that in many areas the disease is chronic with plant communities “just” surviving that should be officially listed as “threatened”. Official listings are important to ensure that more funding is forthcoming for the maintenance and ongoing treatment of some of the most threatened communities including banksia woodlands and heaths.

The strategic mapping can be used as another GIS layer for strategic planning, and also for further raising awareness and understanding of the disease.

Posters will soon be available and can be requested from Project Dieback Support Officer Heidi Loncar, at Southcoast NRM ( [heidil@southcoastnrm.com.au](mailto:heidil@southcoastnrm.com.au) ).



The Perth NRM Region looking east – this awareness raising image depicts the extent of *Phytophthora cinnamomi*. Infestation (in red) across the Swan Coastal Plain and the Darling Ranges, highlighting the importance of those areas that are still dieback free (in green). Image created by Gary Muir.

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## NGIWA working to Stop the Spread

The Nursery and Garden Industry of Western Australia has teamed with scientists from the Centre for Phytophthora Science and Management (Murdoch University), the Cooperative Research Centre for National Plant Biosecurity and the Dieback Working Group (Perth Region NRM) to tackle the issue of spreading plant diseases such as Phytophthora Dieback into private and public gardens as well as rehabilitated bushland in plants purchased from local garden centres.

Once established, Phytophthora Dieback is very difficult to eradicate and is readily spread through the movement of infested soil during gardening activities. Its establishment in home and public gardens also increases the risk of its spread to neighbouring public and private gardens and bushland reserves.

With increased trade in plants both within Australia and across the country, all of the project partners see the importance of generating practical recommendations to improve early detection and management of these plant pathogens and allow swift responses in the event of an incursion within the nursery industry.

This is the first program of its kind in Australia in which practices within the Nursery Garden Industry are being tested based on a risk analysis framework. Customers buying from accredited nurseries will be able to have greater confidence that they are not introducing Phytophthora Dieback into their home gardens.

## DIG 2009

It's time for all those involved in the fight against Phytophthora Dieback to meet and discuss the past years successes and problems. The Dieback Information Group Forum will be held on Friday, June 5th, (World Environment Day) 9am-4pm at Murdoch University, South St in the Kim Beazley Lecture Theatre

This years DIG will be structured around the following core streams:

- **Management** – looking at on ground work in community, industry, state and local government.
- **Research** – Including new research and on-going work.
- **Education Initiatives** – Including community and school age programs.

With particular focus on the theme of past successes, present work and future directions.

We look forward to seeing you all there. I will be in contact by email with registration details soon. For more information contact Libby on Libby.Burgess@water.wa.gov.au .

If you would like to update your contact details or would like to unsubscribe, please contact the DWG on the following details

**Dieback Working Group  
Perth Region NRM  
PO Box 2206  
MIDLAND WA 6936  
www.dwg.org**

**E-mail  
mail@dwg.org.au**

## Calendar of Events

March 29 9am-12	Wireless Hill Dieback Field Day. Meet in the main carpark. Sausage sizzle lunch provided
April 19 9am-12	Roleybushcare Dieback Field Day Canning Mills Reserve Meet at the corner of Canning Mills Rd and Kylie Rd Morning tea provided

