An information sheet for conservation-minded landholders and others interested in conservation land management

Theme Vegetation management

Source event *Adding complexity to restoration sites* – field day at Berry 19/09/24

Landcare host Shoalhaven Landcare

Traditional Country Dharawal

Myrtle rust and *Phytophthora*

> "Here we have our *Rhodamnia rubescens* scrub turpentine you'll notice a branch with lots of dead leaves

Speaker Carolyn Ridge, Landholder and workshop host

Topic A brief introduction to two high-threat plant diseases.

Key points

Myrtle rust *Austropuccinia psidii*

- a fungal disease affecting the *Myrtaceae* family — including eucalyptus, willow myrtle, turpentine, bottlebrush, paperbark, tea tree and lilly pilly
- bright orange fungal spores appear on the leaves, stems, flowers and fruit
- can kill particularly vulnerable species like *Rhodamnia*, and damage other species
- first detected in NSW in 2010
- in NSW there are four species listed as Critically Endangered due to myrtle rust, and more than 40 species across Australia likely to be in severe decline
- can spread rapidly over long distances via wind, water, animals, equipment, vehicles, clothing, and infected plant material
- **practically impossible to eradicate** in the field (due to off-target impacts from fungicide, WHS issues, and the need to re-apply fungicides — often every two weeks) — **so it's vital to stop the spread**
- *Rhodamnia rubescens* does appear to have some resistance to myrtle rust, and field trials are underway to test this resistance.

Phytophthora cinnamomi

- a water mould, causing *Phytophthora* dieback
- can spread rapidly over long distances, via movement of soil, water or plant material, e.g. on shoes, vehicle tyres, tools etc
- extremely difficult to eradicate — so it's vital to stop the spread.

Behind the sweet pittosporum, which is the limey-leafed tree, you'll notice a branch with lots of dead leaves – it's a skeletal type branch. That was the height of our *Rhodamnia*.

And unfortunately, it couldn't cope with the last three-and-a-half years of wet weather.

It had managed to evade myrtle rust up until that time, but the last three years have just been too much

It's a tree that's been listed as critically endangered – and the reason being that myrtle rust affects it really badly

For the moment, it's not looking good for this particular species, which is a shame, because it's absolutely beautiful – specially the little flowers. It's a wondrous tree, so it'll be a sad loss.

In Landcare, there's a lot of landholders whose stands of the *Rhodamnia* have been completely decimated

All of our large trees in the creek gullies in our bush forest have gone. There's a few that are clinging on in other areas.

We need to be vigilant about keeping our shoes and clothes clean when we enter a forest,

and just very aware of what we're bringing into native plantings or national parks or anywhere really.

This large tree – we let the Mount Annan [Botanic Gardens] staff know that it was there. And they came and they took samples, and took some seed that we'd gathered (before it was listed as critically endangered).

So hopefully they're finding resistant trees that will, in time, beat the myrtle rust"

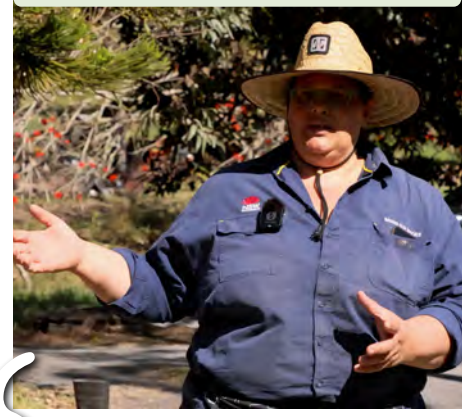
The orange spores of myrtle rust.

The rust-affected Rhodamnia.

PRIVATE LAND CONSERVATION MATTERS

Landcare NSW and the NSW Biodiversity Conservation Trust are working together to raise awareness, and support private land conservation efforts across the state.

Speaker Dr Beth Mott
Threatened Species Officer NSW DEECCW



One of the first things we need to do before we go anywhere on the property is to think about our potential to bring disease into the landscape

And that's becoming increasingly important when we see diseases like myrtle rust and *Phytophthora* really impacting our plant communities.

So what I would like us to do, first of all, is to make sure that our boots are clean before we walk too far all over the property.

Does anyone know much about *Phytophthora?*

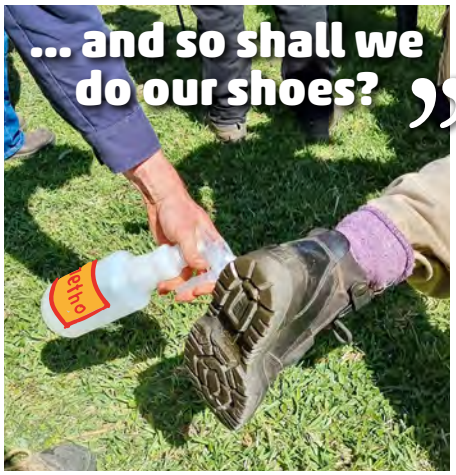
And myrtle rust is another one that's impacting a whole lot of our Australian natives

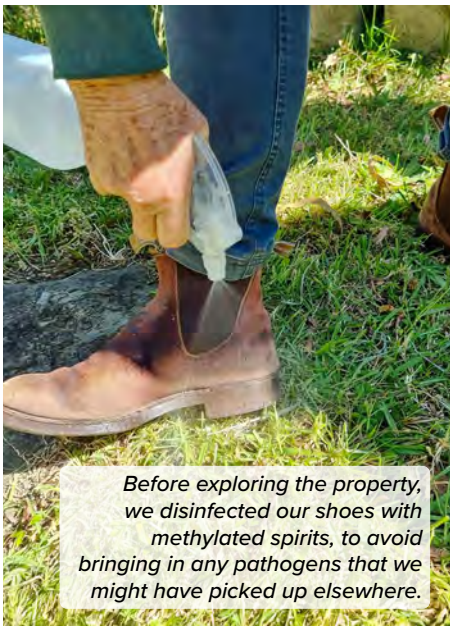
Our Myrtaceae and a whole swathe of these different plant species are being impacted by myrtle rust.

So we really need to be more mindful of our disease potential when we're walking on site.

I think about it all the time when we're driving vehicles on site and we're bringing weeds and all of those nasties in on the bottom of that car.

So I'm really trying to encourage that we are careful when we get in amongst the bushland ...





Before exploring the property, we disinfected our shoes with methylated spirits, to avoid bringing in any pathogens that we might have picked up elsewhere.

Speaker Len White, bush regeneration and feral animal control contractor

Phytophthora is a water mould

It's a big problem in agriculture – particularly in grain crops. In Western Australia they've got a very large *Phytophthora* problem.

Its not naturally occurring in our native bushland – so eucalypts are really affected

– particularly snow gums in the Kosciuszko area. Now you see mountains just dead, because *Phytophthora*'s got in there and just caused mass root rot.

We don't have a lot of it here on the South Coast yet. But the biggest risk factor is people going to an area that does have it – Coffs Harbour has quite a bit of it – and bringing in plants from there.

Theres a very high risk of *Phytophthora* being introduced

And once its in an area, you see – just randomly – whole stands of vegetation – eucalypts particularly, but sometimes even down to grasses and native groundcovers – just all dying. Like someone has gone in with a helicopter and Roundup and just killed it. That's exactly what it looks like.

And really hard to control. Once it's in a site you can put a lot of fungicides in, you can try and reveg it. But it can be very hard to get rid of.

General information

Landcare NSW Partnering in Private Land Conservation

NSW Biodiversity Conservation Tust

Study conservation land management online. Includes a range of conservation land management e-learning courses.

Thanks to the organisers, presenters, participants and agency staff, who allowed us to record this event, and assisted in developing this resource.

The main text is derived from speakers' quotes. Captions and green headings are additions.

Design, editing and images: Little Gecko Media.

Created for Landcare NSW, 25/03/25.

Ideas for action

- To prevent the spread of myrtle rust and other pathogens, practice good hygiene by ensuring all equipment, clothing and personal items are clean before and after activities in potentially infected areas. Spray with 70% ethanol (boots, tools etc) or wash thoroughly with detergent and warm water.
- Set up a cleaning kit to leave in your car.
- Find out if any pathogens are in your area or nearby – your local Landcare group would be a good place to start.
- Consider how you can minimise the chance of disease spread when walking on site, driving vehicles on site, or moving plant material around.
- If you visit *Phytophthora* or myrtle rust hot spots, take extra care to avoid spreading them.
- If your property is disease free, appreciate it! And plan to keep it that way.