## Landcare matters

Hotham-Williams sub-catchment update



PHCC Working Together

Peel-Harvey Catchment Council

Edition / September 202



NRM is the management of natural resources such as land, water, soils, plants and animals. It brings together land use planning, water management, biodiversity conservation and sustainability of industries such as agriculture, mining, tourism, fisheries and forestry.



### Spreading Fungus (In a Good Way)

Most people know of a local patch of bush with cathedrals of bridal creeper covering the vegetation and smothering native species. You may also be aware of biological control agents 'rust fungus' and 'leaf hopper' which have been released at various locations in the past to control bridal creeper (BC) populations (There was also a leaf beetle which is not as widespread and less well-known).

Information in this article about the rust fungus is taken from 'Decline of the invasive plant *Asparagus asparagoides* within the first seven years after release of biological control agents in Australia', Morin L *et al* (2022).



Erupting pustule stage of the rust fungus

The original program to produce and spread the bio-control agents occurred between 1999 and 2004 and we are now at the stage where there are 'natural' populations of both the fungus and the leaf hopper in the landscape, with varying degrees of impact on BC infestations. There are several methods where private landholders, community groups and organisations can collect and spread the rust fungus onto healthy stands of BC. The most common method you will come across is making 'spore water' with infected foliage and spraying it in the desired locations. According to CSIRO, the 'rubbing' method is easier and more effective. and the PHCC Hotham-Williams team have tried this technique in a section of the Hotham River where it intersects the Codjatotine-Mooterdine Road.

This involved collecting rust-infected foliage which was at the 'erupting pustule' stage and rubbing it thoroughly on a two square metre area of healthy BC, ensuring contact with the underside of the leaves. The patch was then lightly sprayed with water and covered with plastic for 24 hours to ensure a humid environment, which is required for spore germination and penetration of plant tissue.



Collecting infected foliage



Covering the BC after rubbing with infected foliage  $\,$ 

We have a number of questions to find out answers to! Will rust fungus release sites benefit from multiple years and locations of manual rust-spreading? Once rust has infected a site, how likely is it to increase naturally over time? Why does rust appear to stay at very low levels at some sites? Can herbicide be used in conjunction with the rust fungus once the BC has reduced in density within a site?

The reason for these questions and efforts to have current/local rust fungus release sites, is that we would like to be able to use it as a suppression tool where budget does not allow for more intense management, such as herbicide application. BC is such a widespread and invasive weed, and time has shown that it is now a permanent part of the landscape. Practical, cost effective and efficient methods of controlling (or at the very least suppressing) bridal creeper, are the key to coexisting with it on a local scale.

This project is funded through partnerships with both South32 Worsley Alumina and Newmont Australia (Boddington).

#### Landcare matters

Hotham-Williams sub-catchment update



### Numbat Neighbourhood Project Wraps Up

The Numbat Neighbourhood Project wrapped up at the end June 2023 and we are pleased to say that the numbat numbers within Dryandra Woodland have improved since the project started in 2018. DBCA's camera monitoring data and the Numbat Task Force and Dr Tony Friend's drive survey data supports this increase in the trajectory of the numbat population as does the increase in sightings of numbats by members of the community.

Through Numbat Neighbourhood Community Environment Grants 67 km's of fencing has been installed by farmers to help protect 845 ha of on farm habitat and 33 ha of revegetation. Large scale feral animal control around Dryandra saw 374 feral cats, over 1500 foxes and more than 1200 feral pigs culled as well as the RHDV1 K5 rabbit virus released 4 times to help control the rabbit populations. 264 ha of bushland was assessed for dieback and 117 ha of bridal creeper and spiny rush controlled. 8 red-tail phascogale nest boxes were installed and 2 hollow logs were placed into a newly created wildlife corridor to provide habitat for numbats. Over 900 community members attended Numbat Neighbourhood events and training and 6 landholders are now registered for Land for Wildlife after having their properties assessed.

Through the Project PHCC has become a member of the Numbat Recovery Team and has been able to support the Perth Zoo's numbat breed for release program with 18 numbats released into Dryandra during the project. We have been able to value add to DBCA's on reserve activities including feral free enclosure maintenance, new monitoring regimes on satellite blocks and habitat and fauna surveys.

We have worked closely with the Wilman Community throughout the project and would like to thank them for their guidance and involvement. Thank you to all the landholders, community members and stakeholders who have made this project a success and we look forward to working with you again in the future once we find out about our future funding. In the meantime, we are continuing to support feral animal control activities through already established agreements. Please get in touch with us if you have any future project ideas, we'd love to hear from you.

The Numbat Neighbourhood Project was funded through the Australian Government's National Landcare Program.



Numbat, taken by Rob McLear

# Wait.... What? I can join the Peel-Harvey Catchment Council?

Yes you can! If you want to be part of an awesome organisation hell bent on protecting the environment and our beautiful waterways here's your chance.

Nominate now to be a community representative on our Board.

Check out our constitution here: <a href="https://peel-harvey.org.au/about-us/how-we-are-governed/">https://peel-harvey.org.au/about-us/how-we-are-governed/</a> and ask yourself if you want to miss the opportunity to be involved in an organisation with such inspiring objectives.

We are particularly looking for members with knowledge/skills/experience in biodiversity, legal and finance. We are also keen to bring on some younger members and will provide mentoring, support and training.

So, don't wait click on the link below and nominate today.

Nominations close 10am Wednesday 4 October 2023.

Visit <a href="https://peel-harvey.org.au/get-involved/board/">https://peel-harvey.org.au/get-involved/board/</a> for a self-assessment and nomination form.

Check out our website, social media or contact us on 6369 8800 for more information.



#### Up coming events:

**'Top fodder' Workshop** Monday 11 September 2023

Visit: https://peel-harvey.org.au/ events/top-fodder-workshop/

for details and to register





victoria.brockhurst@peel-harvey.org.au www.peel-harvey.org.au





