

ABC South West Saturday Breakfast with Jacqueline Lynch

Saturday, September 29

Jacqueline Lynch

Southwest ABC Radio WA. You will know of the marron, we have them here around the South West. But have you heard of the Margaret River Burrowing Crayfish until I told you about it two minutes ago?

Maybe you haven't, because it's pretty rare. In fact, it's critically endangered and researchers from South West NRM have been trying to go and find them.

Sustainability and Environment Lead Linda Metz is on the line. Good morning, Linda how are you?

Linda Metz

Good.

Jacqueline Lynch

Have you found any of these burrowing crayfish?

Linda Metz

We have, we have and we know that there's probably more out there. So that is actually our current project at the moment is we're seeking land holders who might have some permanent water features on their property, and some good, maybe vegetation that might be home to these little guys.

Jacqueline Lynch

How do people know if, I mean, obviously, they might see them, but otherwise, are there signs that there might be some burrowing cray on their properties.

Linda Metz

These guys are actually very, very small. So unlike some of the other freshwater crayfish species, that people will be familiar with like, you mentioned the marron, which is pretty big, these guys are actually very, very small.

So the Margaret River burrowing crayfish is one of five *Engaewa* species that occur within very restricted ranges within the South West region and these guys, unlike other crayfish are very little. So they're about five centimetres in length, four to five centimetres in length.

And so they often may go actually completely unnoticed. They have very unusual little chimneys that they create because they're actually burrowing. So again, different to their friends.

They are usually in areas near water. So, soft kind of clay, soils, they burrow in and actually create these little chimneys. And they have a quite distinguishing pincers.

Jacqueline Lynch

Are they bright blue did I see that?

Linda Metz

That's exactly correct. Yeah. So again, different to their cousins, who are, you know, the marron are much darker. They're sort of that brown, black kind of colour.

These guys are actually much paler in coloration, and they have got bright blue pincers, which are quite distinguishable. The pincers are almost a little bit enlarged if you will, compared to the rest of their body, because of that digging nature.

So they've got these adaptations that actually facilitate them being able to borrow and move soil more efficiently.

Jacqueline Lynch

Linda Metz is the Sustainability and Environment Lead at South West NRM where they have been searching to try and find more of the Margaret River burrowing crayfish. Why do you need to find them? How many are left that, you know, about?

Linda Metz

I guess if we think in terms of the broader range and we know that because obviously things like threats in the South West so their natural habitats contracted quite significantly. And that's part of the reason why they're listed as critically endangered.

Because they're in and around these sorts of areas that are very wet, sometimes these areas are impacted by livestock, or they're cleared for access to dams, and things like that, and the vegetation is removed.

And so because of that and now, of course, we've also brought the added threat of a drying climate. So we know, some of the natural extent where they would have been previously is contracting.

We really kind of need to find where these guys are and that's part of our study in our work is to try and get out there and locate these guys. So we have to do it clever because what we don't want to do is go out there and just dig up their borrows to find out if they're there, which is why we're using e-DNA.

So we go out and take water and soil samples, and do analysis in our laboratory to test for their presence or occurrence of their DNA in the water, and that's helps us to find these guys.

So we can use this in addition to trying to visually locate the chimneys. But they're really small and where you've got quite thick, you know, vegetation around the sides of the dam it might be actually be really, really hard to find them.

Environmental DNA technology that's available these days to help us confirm presence of the species is amazing stuff.



Jacqueline Lynch

And then what do you do once you find them?

Linda Metz

So the great thing about this project is we want to help people. So if you have got a permanent water body or dam on your property and it's not currently accessed by livestock but it might be part of the tributary or you've got some vegetation around it, we want you to get contact with us because if we can locate the species on your property, we can assist with things like fencing or weed control and re-vegetation to help ensure the longer term persistence of the species at your location.

If anyone's out there get in touch with us via our website.

Jacqueline Lynch

Yes definitely. South West NRM Sustainability and Environment Lead Linda Metz talking about pretty hard to spot creatures but pretty unique creatures. The Margaret River burrowing crayfish searching to find a few more of those critically endangered crayfish and basically just trying to protect them.