

Transcript

Public Sector Unearthed – EP#9: The latest buzz: Innovative European wasp control with Daniel Patterson

Julia Ahrens:

Hello, everyone. Before we get started with this podcast, we'd like to acknowledge the traditional custodians of the land on which we are meeting today, the Ngunnawal and the Ngambri people, and pay our respects to their eldest past, present and emerging. And acknowledge the ongoing contribution they make to the life of our city and this region. We'd also like to acknowledge the custodians of all the lands from where anybody listening to this podcast is also joining us from.

Daniel Patterson:

Except for WA, ACT is the only state or territory where European wasps are declared pests. European wasps have nests with large numbers, they're often in our public spaces, so we feel the need that we need to intervene to make our places safe. Anything that we can do to help the community. We're into year three now, so we are a little bit down the track, thank goodness. And so, we've learnt a lot. We've managed to improve on our trapping techniques with help from consultants. And now, we feel like we've learnt enough that we're doing everything on our own. We've been able to reduce the number of traps we put out, but still capture the same or more wasps.

Julia Ahrens:

Welcome to Public Sector Unearthed, a Work With Purpose spin-off series about the people who drive grassroots change and reform in Australia's public sector. My name is Julia Ahrens and I'm IPAA ACT's communications and engagement manager. And I'm really excited to be back as your host today. On Public Sector Unearthed, as you know, we are putting people and their stories front and centre. Our guests talk about their journeys in the public service and how they're making a difference, that can be through projects they work on, mentoring, communities of practice, diversity and inclusion networks, and the effective promotion of the values and purpose of the public sector.

The voice you heard at the beginning of this podcast is Daniel Patterson, who is an invasive plant and invertebrate pest officer with Transport Canberra & City Services directorate. Daniel started his career as a horticultural apprentice, and now manages the European wasp control in Canberra. This program is a first targeting nests across the ACT, and as you'll hear, it's gone from strength to strength. This initiative even earned the team at 2023 Spirit of Service Award in the breakthrough category. As you'll hear, Daniel has always wanted to work in a space that directly affects the Canberra community and their backyards. Let's hear from Daniel now.

Daniel, it's great to have you here.

Daniel Patterson:

Thank you. Thank you for having me.

Julia Ahrens:

Now, let's start with your journey into this role. Wasp control is obviously quite a specialised area. Can you tell us a bit more how you got into this role?

Daniel Patterson:

Yeah, it's a little bit different to the norm. So, I've had a career now in the ACT public service for over 20 years, and I started as a horticulture apprentice, and I've stayed with the department the whole time. And so, I've progressed. We have a specialised pest management team, and so I progressed into their team and started learning about some amenity weed control and invasive weed control, and then some pests. And one of the pests that we deal with in the urban area is European wasps. And so, they've been growing and growing over the years. And now I've progressed into this role now where I manage that program.

Julia Ahrens:

Yeah. So, obviously coming from Germany, I know a little bit about European wasps and what it means when they're around big numbers. Why is it necessary in Canberra to control them?

Daniel Patterson:

Except for WA, ACT is the only state or territory where European wasps are declared pests. So, even though everyone knows that they're a pest, like other species or animals, they're actually declared. So, there is legislation behind, people sometimes need to control declared pests. And for ACT government, I think we are very community focused. So, European wasps have nests with large numbers. They're often in our public spaces, so we feel the need that we need to intervene to make our places safe. But they also pester people, businesses, or at home and places like that. So, anything that we can do to help the community.

Julia Ahrens:

They're definitely very stressful to have around, I can attest to that.

Daniel Patterson:

Yeah, they're quite aggressive.

Julia Ahrens:

They absolutely are. And they go straight for the eyes or the mouth. No, it's definitely a good thing that you want to keep them under control. But how did the project first start?

Daniel Patterson:

Well, solution-based thinking is always at the front of our mind. And so, with other programs, we always look at preventative action. And with European wasps, everything's been reactive. So, there's never been anything before that we can target wasps without them being there in the first place. And so, once we found out and once we were told, "Hey, there's a new product coming available that we should trial," from our consultant, told us that there's this new thing coming out, we jumped on it straight away. And said, "We need to trial this and see if it works in the Canberra environment." Never been trialed here before. And also, the potential that it had to help was something that was definitely wanted to explore.

Julia Ahrens:

So, take us through the mechanics of it a bit. How do you trap the... Because it's mainly about the queens as I understand it.

Daniel Patterson:

It is. It is completely about the queens. So, the queens... Well, we're in autumn now. And so, very shortly, the queens will start to leave nests and they'll breed and then they'll hibernate over winter. And so, when they emerge from hibernation in spring, they need to fend for themselves and they need to feed themselves. They will start creating their own nests. And so, as part of that process, they will of course need to feed themselves, and the first thing they look for is carbs. So, they're in search of carbohydrate sources to feed themselves, like I think any of us, when we-

Julia Ahrens:

I was just about to say that sounds very common for humans as well.

Daniel Patterson:

Yeah. And especially when we hibernate or we chill out, we need that sugar hit.

Julia Ahrens:

Love it.

Daniel Patterson:

So, the product that we use is carbohydrate-based. And so, Sundew Solutions, they've got a complete package. So, they have designed and developed this... It's a non-toxic, non-chemical, eco-friendly product, which is just ticks all the boxes for ACT government and other users. And it attracts the European wasp because it's carbohydrate-based. So, they come in thinking that it's food and the lure is liquid. And it sits inside a specially made... it's called a dominator trap. And it's got two entry holes which have one-way valves. So, once the wasp get in, they can't get out.

Julia Ahrens:

All right, and then do they just die in there or-

Daniel Patterson:

Yes, yep. So, they either fall into the liquid... It coats them because after a period of time it goes quite jelly, and so it coats their wings, so they can't fly away. And then, either they die in there or then when we come to inspect the trap, we euthanise them.

Julia Ahrens:

Euthanise them?

Daniel Patterson:

Yes.

Julia Ahrens:

Okay. So, obviously, you go out and do this quite frequently. Can you tell us of an example of a particular nest that has really stuck in your mind, like a story of that, how you've removed a specific nest and-

Daniel Patterson:

Yeah, so generally, we don't remove nests because they're normally in the ground. And so, in the last few years, there has been quite a change where it's becoming more common that they'll nest in buildings. And so, they'll get into people's roof voids, under older houses and nest under houses, or even in wall cavities. So, they'll sneak in there. So, I'm glad that I don't have to deal with those ones because they're quite dangerous when they're very exposed like that. But one that sticks in my mind that I've been out to treat was one of our maintenance depots has a storage yard, and they had the Bobcat operator there loading the truck with soil with his bucket, he cut through half of the nest. And of course, wasps were-

Julia Ahrens:

Everywhere.

Daniel Patterson:

... everywhere.

Julia Ahrens:

Did he get stung?

Daniel Patterson:

Luckily, he was in a sealed cab. But as you can imagine, a lot of our other staff or mower operators or even members of the public when they step on a nest or something, don't have that luxury. So, it is quite common for people to be stung in that situation. So, I did go and go out shortly after and treated the nest, but it was amazing to see that it was just clean cut in half, and you could see all the layers and all the cells. It's quite a unique and very beautiful nest when you look at a European wasp nest.

Julia Ahrens:

The architecture is quite pretty? Yeah.

Daniel Patterson:

Yeah, and all the work that would go into it. So, that one just sticks out in my mind.

Julia Ahrens:

No, I can't imagine. And probably for the guy who was driving the Bobcat-

Daniel Patterson:

Yeah, absolutely. And it was quite large. So, they say an average European mature wasp nest is about the size of a basketball, and this one was about double that size.

Julia Ahrens:

Yeah. So, going back to that idea of luring the queens out once the queen is gone, how does the hive behave after that?

Daniel Patterson:

Well, part of the program, when we trap the queens, that prevents any nests from even happening in the first place. So, without the queen, the nest can't even establish from the beginning. So, that's why it's such a good preventative practice because they're a praying insect and they consume so many other insects and things, that takes food sources from our native animals and things like that as well. So, program when we start in spring, and if we can prevent nests from even forming at the start, then the environment's so much better for it.

Julia Ahrens:

Yeah, absolutely. I mean, it's always better to tackle it with preventative measures than trying to get in when the beautiful architecture has already been built and then you have to destroy it. It's much more difficult, plus much more dangerous as well, I'd assume.

Daniel Patterson:

Yes. Yeah, that's right.

Julia Ahrens:

Yeah, absolutely. So, what are you hoping where this program will go in the future?

Daniel Patterson:

Well, we're into year three now, so we're a little bit down the track, thank goodness. And so, we've learnt a lot from the first two years especially. And we've managed to improve on our trapping techniques with help from consultants. And now, we feel like we've learnt enough that we're doing everything on our own. So, I've got a great team of support around me, and we've skilled ourselves up with all the knowledge absorbing from the use of specialists and consultants. And we still get support from the manufacturer, Sundew Solutions. So, that in itself is another challenge to take that on. But we're comfortable where we're at and we've been able to reduce, over the years, the three years now, we've been able to reduce the number of traps we put out, but still capture the same or more wasps. So, when we started, we caught I think about 640 wasps with 180 traps.

And then, just this spring gone, we deployed only 100 traps, but we caught just under 1,500 wasps. So, our techniques are improving, we're getting better at it. So, that's one thing that's exciting for us, that our program are working. In terms of direction, where we can take it. We're very blessed the ACT community, and we have a great volunteer program. And so, we have volunteers that just want to help out in their urban parks around their community or they do conservation work on some of our remnant conservation sites just within the urban area.

And I think it would be positive if in the future we could get the community to assist us with the trapping program because it's, like we said before, and it's a non-toxic product-

Julia Ahrens:

It's safe.

Daniel Patterson:

... and we have this great group of volunteers that want to make a difference in their community. And I think that this program would be a great asset to get them involved with. So, that's some of the things that I'm thinking of. Some of the sites where volunteers work, we're already trapping, so it just makes sense to partner better with the local community and get better outcomes.

Julia Ahrens:

Absolutely. So, when we talk about local communities and maybe people on the ground who are currently listening to this podcast and go like, "I'm not actually sure how to actually distinguish a European wasp from other local native species," what do people need to look out for?

Daniel Patterson:

Yep. And you're spot on there, because although they're not native, European honeybees are often mistaken because they're a similar size and colour, they're a little bit duller in colour, but they're similar. Their traits aren't the same and they don't feed on the same. So, the difference with wasps is of course, is that they will eat protein as well. They're definitely not fussy scavengers. But on our website, on the City Services website, we have some ID images and things to help assist with people that... close lookalikes. And so, some of our native wasps, like the mud dauber wasp or the native paper wasp, we've got those images on there. And then, we've got the European honeybee, which we like to protect as well. And then, we've got the nasty European wasp.

Julia Ahrens:

Is it listed as the nasty European wasp?

Daniel Patterson:

It's not listed as the nasty European wasp, but-

Julia Ahrens:

Should be.

Daniel Patterson:

... it should be.

Julia Ahrens:

Yeah, absolutely.

Daniel Patterson:

Their behaviour sometimes definitely dictates that.

Julia Ahrens:

100%. So, listeners, you would've heard, we'll leave a link in the show notes to the website so you know how to identify the European wasps. And also, Daniel, I'd love to hear from you how people reach out to you if they discover a nest or discover just wasps flying around their property or public spaces, how can they get in touch?

Daniel Patterson:

Yeah. Well, on our same page on the website, we have a direct-reporting section. So, we've got a smart-form on the website so that people can fill it in, it's got a map, they can drop a pin. And then, most likely I'll get in contact with you and say, "Hey, either we've treated your nest," or, "How can I help out?" Because often, especially with businesses or some things, they will get streams of wasps just coming and pestering the customers or attracted to their delicious foods that they might be selling, and they might not know where a nest is. So, in those sort of situations, which normally happens around now in Autumn, we can come out and assess and do some wasp tracking and we can see if we can track the wasps back to a nest and destroy it to help those customers out.

Julia Ahrens:

So, Canberrans, keep an eye out for wasps and make sure to report them to Daniel and you get to work with Daniel, hear possibly a bit more about European Wasp control in Canberra. Thank you so much, Daniel, for coming onto the pod today. It was great talking to you.

Daniel Patterson:

Lovely. Thank you so much.

Julia Ahrens:

Listeners, I hope you really enjoyed this conversation with Daniel. It was really something that was close to my heart because I have definitely experienced European wasps extensively in my time in Germany, including eating my cake and my sausages, and it always made me very sad. And it's an unfortunate thing that they do love to go straight for your nose and face. So, it's good to hear that we are controlling this invasive species here in Canberra. And it really goes to show that working in the public service goes beyond developing policies and handling paperwork, and that there's just so much more to it. To hear about these kinds of innovative approaches about tackling nests and queens, and making sure that passionate people do the important work of the public service.

Daniel team's work was clearly a very deserving winner of the Spirit of Service Awards last year. And if you think your team is working on a similarly-exceptional project that is changing Australia's communities for the better, you might want to nominate for this year's SOS Awards. Our nominations are now open, so make sure to check out act.ipaa.org.au for more information.

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