## Transcript - World Bee Day Podcast with Claire Moore and Jo Grainger, Agriculture Minister Counsellor – Brussels

**Jo Grainger - Agricultural Counsellor (Brussels)**

Oh, hello Claire. Welcome to talking to the Australian Embassy in Brussels. How are you doing?

**Claire Moore**

I'm fantastic, thank you. How are you?

**Jo Grainger - Agricultural Counsellor (Brussels)**

Really well, really well. So Claire Moore has joined us today. She is the 2019 AgriFutures Rural Women Award national runner up.

And she got that fantastic award because of her work breeding genetically diverse queen bees. So, Claire, tell us about where your research is and what you've been up to.

**Claire Moore**

Well, since the awards in 2019 I've been working on my bees here on our farm in Kyneton and that's been a really fascinating experience. I've met a whole range of amazing people really, really fascinating geneticists and different scientists who have offered to help.

I've also attended Tocal TAFE in New South Wales and learnt queen rearing and it's been delayed because of COVID-19, but I start the artificial insemination course in December it was meant to be December last year, so December 2020, but will now be December 2021 and it's all been a really exciting and really steep learning curve.

Fascinating process, but it's actually led me in a lot of different directions. AgriFutures has actually opened up my world far more than I ever believed it would.

My life before AgriFutures was very, very different. I was a farmer, and I was a mother and I was at home on the farm quite a lot apart from farmers market so I wasn't really sort of out much.

But now being involved with AgriFutures, my life is on steroids! I must admit so. It's been a fascinating process. One I'm very grateful for.

But during that process I was actually on radio here in in Melbourne and I was speaking with a radio announcer and telling them about the research that I was doing into queen bees and genetics and we were just kind of discussing, beekeeping in general in Australia and the Varroa mite. Because Australia was the only honey producing country in the world that doesn't have the Varroa mite.

So obviously in Europe where you're based at the moment, the Varroa mite has been established for quite a while, but lucky for us here in Australia, we don't have the Varroa mite yet.

So, I was speaking on radio about how we had the cleanest bees in the world. We're very, very lucky not to have had the varroa mite. And during that radio discussion, the radio announcer actually mentioned that in America they've started teaching beekeeping within the justice system. And it seemed very left field.

But in a COVID lockdown here in Melbourne, I started doing the same, and started teaching beekeeping within the youth justice system in Australia, which is going amazingly well, and I've now linked it to a social enterprise. It's going to be based in Bendigo in Victoria, where 13 young people a year will be paroled out of the youth justice system to become commercial beekeepers.

**Jo Grainger - Agricultural Counsellor (Brussels)**

Wow, that's absolutely fantastic.

**Claire Moore**

Yeah, fantastic I diverged a bit there.

**Jo Grainger - Agricultural Counsellor (Brussels)**

And so that breeding, we can help breeding the next generation of beekeepers and so I guess with your social enterprises that's what you're going to take forward next, or that may actually help you in your research on genetically diverse queen bees.

**Claire Moore**

Or very much so. So, I worked out this Spring that one, I need more help, I need more labor. I need more bees and I need more help from scientists and from universities and it's when, it was one of those things where I thought, 'I've got this'. I've got this under control, it's gonna be OK.

You know that classic tipping point of, ‘no, I don't have this’. I didn't know as much as I thought I did to begin with and I'm gonna need some help and I'm gonna need more bees to be able to achieve this.

And I'm also gonna need the help of the greater beekeeping industry in Australia. Like we need to, we need to work together.

The idea behind the research was to be able to find some sort of the gene or genetics for queen bees in Australia that may be resistant or cope better with the Varroa mite when it does arrive in Australia.

And so, with that, we have actually found that there are 3 different places in the world. So, in Europe, in Africa and Asia, where European honey bee have actually built a natural resistance to Varroa.

So, finding that resistance in Australia and then breeding those queen bees so that when Varroa does arrive that we almost have a form of herd immunity. And I think perhaps Coronavirus coming has actually in a way really helped me explain what I want to do with the research. It's a perfect example of what would happen in Australia when Varroa does arrive.

So, in the rest of the world, we know that that a lot of the hives were decimated. There was mass mortality when Varroa arrived. It's a parasite that Australian honey bees have never seen before. They've never been exposed to it before, and there will be a large mortality when it does arrive, so we're trying to prepare now, and my research is trying to prepare now for when Varroa does arrive.

So, it does feel like the clock is ticking and the pressure is on and we do need to find an answer soon. Like we, and I think all of Australian beekeepers need to be working together to try and find an answer to this.

Really, the Australian honey industry is worth $101 million Australian dollars, but the pollination industry is worth $30 billion in economic value every year.

So a lot of our food security is dependent on our honey bees, and when Varroa, arrives because it's inevitable, it has arrived on our shores twice already. When it does arrive, I think we need to be better prepared and we, I mean Agriculture Victoria and the Australian Government has prepared the best it can, and their support has put a lot of protective mechanisms in place. Australian biosecurity is world class and we've done an amazing job. But that can only last for so long.

**Jo Grainger - Agricultural Counsellor (Brussels)**

Fantastic, well I can hear so much passion and engagement there. What is your vision for the future of bees in Australia and around the world? What do you want to achieve?

**Claire Moore**

What do I want to achieve? I want Australia to have a thriving beekeeping industry with a lot of really well educated, passionate young people. I wanna have herd immunity and an answer for Varroa when it arrives.

I would be devastated if we, if we lost a large number of hives to Varroa.

Also, because it brings with it other pathogens as well that Australia doesn't have. So, there's the little mite that also brings viruses and other things with it. It's not only the Varroa mite but there are other diseases that will come in Australia.

Currently Australia doesn't have a thriving beekeeping industry. Food security is really important to me. I've got 3 little kids and I'm really passionate about what they're gonna be eating in the future.

For example, almonds and apples are 100% pollinated with bees. They don't fruit without bees, so we've got to make sure for the next generation and the generation after that we have enough pollinators to be able to pollinate our crops.

**Jo Grainger - Agricultural Counsellor (Brussels)**

Fantastic! Thank you so much for your time today. Wonderful to spend some time with you and hear about what's going on and the great work that you're doing.

Best wishes for the success of your social enterprise. It sounds like you're finding one of the solutions to the future of beekeeping right there in Victoria.

**Claire Moore**

Thank you very much. Lovely to see you.