Announcer:

Welcome to Urban Plant Health Network's podcast series, The Good, The Bad, and the Bug-ly.

Drew Radford:

Earlier this year, the Earth Watch Institute declared bees to be the most important living species on earth. We rely on bees, and a handful of other pollinators, to pollinate around about three quarters of all fruits, nuts, and seeds that we produce. So if you eat, you have a vested interest in large and healthy bee populations.

Drew Radford:

Until recently, beekeeping has mostly been the domain of commercial apiarists, but it's now becoming increasingly popular with urban gardeners who are also interested in encouraging native bees in our backyards.

Drew Radford:

To find out more about what's involved in keeping bees, I'm joined in the Urban Plant Health Network's studio by Cynthia Kefaloukos, Apiary Pest and Disease Officer at Agriculture Victoria. Cynthia, thanks for your time.

Cynthia Kefaloukos:

A pleasure to be here, Drew.

Drew Radford:

Cynthia, when we talk about apiary, are we talking mainly about European honey bees or does it include native bees as well?

Cynthia Kefaloukos:

So in Victoria, an apiary would mean a collection of beehives, and it's usually the European honey bee. In the warmer climates in other States, some beekeepers do also have the native stingless bees, but the climate is not right in Victoria for that type of bee.

Drew Radford:

How did you get involved with apiary?

Cynthia Kefaloukos:

So I'm actually a third generation beekeeper. My grandfather kept bees in Greece and my father kept bees in North Coburg when I was a small child where we lived for many years. And just as a family tradition, now my sister and I have taken up the hobby and we're beekeepers ourselves.

Drew Radford:

Wow! So you got a really long history there and you now do it for a job. What's the most amazing statistic you know about bees?

Cynthia Kefaloukos:

Probably the number of beekeepers. So for example, about five years ago, there might have been roughly 4,000 beekeepers compared to today where there is over 12,000.

Drew Radford:

That's a dramatic increase. Why has that occurred, do you think?

Cynthia Kefaloukos:

Well, I think there is definitely attractiveness. I mean, there is nothing better than being able to harvest your own honey fresh from your own hives. The leftover wax can also be used to make candles or food wraps, so nothing is wasted. But I think there is a real shift in focus to things that are seen to be green, natural, and good for the environment.

Cynthia Kefaloukos:

And there is definitely an increased understanding, I think, about the pollination benefits that bees provide. It's not just for commercial production. But I think people are understanding that it's good for your backyard, vegetable gardens and fruit trees.

Cynthia Kefaloukos:

And again, I think family tradition plays a big part in the uptake of beekeeping with children learning the hobby from their parents, just like I did.

Drew Radford:

Cynthia, with such a dramatic increase in the number of beekeepers, what is the world of beekeeping looking like now in Victoria?

Cynthia Kefaloukos:

There are around 30,000 beekeepers across all of Australia and Victoria has roughly a third. So we have around 12,257 registered beekeepers operating around 124,000 hives. Hobbyists with up to five hives, make up the biggest proportion of our beekeepers here in Victoria. And we have around 10,800 of those.

Drew Radford:

So Cynthia, with such a growth in beekeeping, what are the basics that people need to know about becoming a beekeeper?

Cynthia Kefaloukos:

So there’s a lot of things that you need to be aware of. It's definitely not as simple as just buying a beehive and putting it in your backyard. It's not a complete list, but there are five things I usually recommend people consider before they buy a hive.

Cynthia Kefaloukos:

A really good place to start is by having some knowledge about honey bees themselves, so their biology, behaviour and what good beekeeping practices are. Being able to recognise pests and diseases in your hive is extremely important and knowing how to manage them appropriately.

Cynthia Kefaloukos:

I would strongly recommend undertaking a beekeeping course. Joining a beekeeping club or association is another really good way to get access to resources and mentoring from more experienced beekeepers. There's also a wealth of information and videos available for free online, including on our Agriculture Victoria website.

Cynthia Kefaloukos:

The second thing I would ask people to consider is you need to be aware that there are a number of legal requirements, if you want to keep bees in Victoria.

Drew Radford:

Cynthia, you mentioned there, there is a number of legal requirements now regarding the keeping of bees. That's been a recent change, from my understanding. It's now legislated. So what do people need to consider in regards to their legal requirements of beekeeping?

Cynthia Kefaloukos:

So there were always legal requirements to keep bees. That were set out in the Livestock Disease Control Act and regulations. But recently, we've also incorporated the Australian Honey Bee Industry Biosecurity Code of Practice into our regulations. And that brought in a number of new requirements for hobby beekeepers, which would include mandatory inspections of your hive, testing of your hive, recording of your biosecurity observations.

Drew Radford:

So there is a fair bit that you're legally required for. You also said there was a couple of other things that you'd suggest that people consider before they get involved in beekeeping. What are those?

Cynthia Kefaloukos:

You need to make sure that you do have a suitable position for a beehive where it won't be a nuisance for yourself or your neighbour. It should be a sheltered but sunny position where it's going to get morning sun and afternoon shade. But the most important is that the flight path of your bees won't cross over with people or pets. It's a really good idea to also do some research about what beekeeping equipment is available, the costs that are involved and what will suit you best.

Cynthia Kefaloukos:

You're going to need protective clothing, like a beekeeping suit, veil, or gloves, your apiary tools like a smoker or a hive tool. And then there are also different types of beehives in different sizes available. So for example, a Langstroth hive, Flow Hive, top-bar hive, eight frame versus a 10 frame hive. So there is a little bit of research there for you to do.

Cynthia Kefaloukos:

And lastly when obtaining your colony of bees, you want them to be calm and healthy. So you can purchase an established hive or a nucleus colony from a reputable beekeeper or a bee equipment supplier, usually during September to October.

Cynthia Kefaloukos:

Another method of obtaining your bees is to collect a wild swarm yourself. These occur in spring and early summer. But if you are going to collect a wild swarm, it's a really good idea to quarantine them first and check them closely for pests and diseases.

Cynthia Kefaloukos:

Especially when you keep bees in an urban area, having a gentle queen is really important. If your bees are too aggressive and becoming a nuisance to yourself or your neighbours, you will need to re-queen your colony. And because the queen is the only one that lays eggs, a calm queen will produce calm offspring. And the whole colony can be replaced with calmer individuals in only a couple of months.

Cynthia Kefaloukos:

So I would say beekeeping's an extremely rewarding hobby, and well-worth the time and effort. But it's a really good idea just to do your research before you get your hive and give yourself the best chance of succeeding.

Drew Radford:

There is a lot there to consider, Cynthia. Part of your job title is actually Disease Officer and you raise the issue of diseases. What are some of the pests and diseases beekeepers need to be on the lookout for?

Cynthia Kefaloukos:

In Victoria, unfortunately, we do have a number of endemic pests and diseases that beekeepers should be inspecting their hives for regularly. And these include American foulbrood, European foulbrood, chalkbrood, nosema and small hive beetle.

Cynthia Kefaloukos:

With the hot and wet summer conditions that we've been experiencing, we are receiving reports that small hive beetle infestations may be more of an issue this year. So it's a good idea to make sure you're checking your hives and ensuring that your colony is healthy and there are no issues.

Cynthia Kefaloukos:

Some of these endemic diseases are also notifiable. And what that means is that there is a legal requirement to let Agriculture Victoria know if you suspect they are present in your hive. So these would include American foulbrood, European foulbrood, chalkbrood, and nosema. And you can notify us easily by just emailing honeybee.biosecurity@agriculture.vic.gov.au.

Cynthia Kefaloukos:

Beekeepers should also be on the lookout for exotic pests and diseases that are not known to occur in Victoria or Australia. One of the most important is of course, the Varroa mite, a parasite that feeds on honey bees and can transmit viruses leading to the eventual death of the colony. Australia is actually the last major beekeeping country in the world to remain free from Varroa.

Cynthia Kefaloukos:

Other high priority pests include the tracheal mite and tropilaelaps mite and viruses like the deformed wing virus or slow bee paralysis virus, just to name a few. There are also a number of exotic insects that we're trying to keep out of Australia. And these include exotic bees like the African bee, giant honey bee, dwarf honey bee, or the Asian hornet.

Cynthia Kefaloukos:

I would say that early detection is vital to the success of an eradication response. And if we can keep these pests and diseases out of Australia, we can all ensure that we have a healthy bee population and a successful apiary industry for future generations.

Drew Radford:

Cynthia, you rightly point out that anybody involved with bees has got a responsibility in terms of ensuring the ongoing biosecurity of the industry. What are some of the other initiatives that are being undertaken to make sure that the industry remains pest and disease free?

Cynthia Kefaloukos:

The Victorian government understands just how important the apiary and pollination industries are to our economy and our food security. And we're involved in a number of initiatives working together with the apiary industry looking to protect market access, support industry development, and promote bee biosecurity. Some of these initiatives are, for example, our involvement in the National Bee Pest Surveillance Program. Which is an early warning system to detect new incursions of exotic bee pests and pest bees, and involves a range of surveillance methods, including swarm catch boxes, sentinel hives, and sweep netting conducted at sea ports and airports throughout Australia, which are considered to be the most likely entry points for bee pests and pest bees.

Cynthia Kefaloukos:

We also participate in the National Bee Biosecurity Program. which aims to improve the management of established pests and diseases, and also increase our preparedness and surveillance for exotic pest threats.

Cynthia Kefaloukos:

Another important area that we’re focused on is building our emergency response preparedness and capability together with industry. Another way we try to improve our preparedness for an emergency response is through Victoria's State Quarantine Response Team Program, which delivers training every two years to a pool of around 180 beekeepers and government staff that can be deployed immediately to conduct in hive surveillance in the event of an emergency response.

Drew Radford:

Cynthia, there is an awful amount going on there. And as you pointed out earlier, it's everybody's responsibility to try and make sure that the industry remains safe and disease free. It's such a crucial part in our food chain.

Drew Radford:

Cynthia Kefaloukos, Apiary Pest and Disease Officer with Agriculture Victoria, thank you for joining me in the Urban Plant Health Network's studio.

Cynthia Kefaloukos:

You're very welcome.

Announcer:

Thank you for listening to The Good, The Bad and the Bug-ly. For more episodes in this series, find us and subscribe wherever you get your podcasts. We would love to hear your feedback, so please leave a comment or rating and share this series with your friends and family. All information is accurate at the time of release. This podcast was developed for the Urban Plant Health Network.