Careers in Primary Industries – transcript

Sophie Parks, Senior Research Scientist, Horticulture, Central Coast Primary Industries Centre

Hello, I'm Sophie Parkes. I'm the Senior Research Scientist in Horticulture, and I'm working on blueberries currently. All sorts of aspects of blueberry production. The effect of light on blueberry antioxidants in fruit, but also the way bees move under greenhouse covers in blueberries for pollination purposes. And a large part of my work is looking at the nutrition of blueberries and what they need in terms of the amounts of fertilisers.

What is your major project you are working on now?

The major project I'm working on at the moment is for the Clean Coastal Catchment Project. I'm looking at how much nitrogen, blueberries need and once we're able to work that out, we'll be able to advise growers of the guidelines for fertiliser. How much to put on so that the blueberry plants take up as much nitrogen as they need, and so that we're not giving them too much nitrogen that may become pollution, nutrient pollution in the environment.

How does it fit into the role of DPI?

So, DPI has a role in horticulture to provide research that improves the sustainability of production systems in New South Wales.

What is a typical day like in your role?

So typical day for me is variable. But today I came into the office and I started to look at a paper that I'm writing with a research student who has done an experiment on looking at the impact of drought on blueberry production and the fruit and how how that drought affects the antioxidants in those fruits.

What do you love about your job?

I love how my job is so diverse. So I work with technicians who will help me to design the growing systems for conducting experiments. I work with students who also work on those experiments. I work with other scientists and we talk about ideas and come up with concepts for new projects. But also I get to work with the industry and the farmers who are growing blueberry plants. So it's a diverse area to work in.

What could you do without?

So not all project concept that we come up with are successful in gaining funding. And so that is a difficult part of our role as researchers.

Does creativity play a part in your role?

Creativity is absolutely important in doing science. Which may not be what you're expecting, but we're very creative in the way we have to present our information to people. It might be in a written article or a presentation at a grower workshop, so we have to be very creative in those fields. But also when things go wrong in

our experiments, we have to try and work out, be creative in order to solve those problems that we come up against.

What personal attributes are beneficial in this role?

To be a research scientist, you have to be very passionate about your subject area. You've got to be ... I think being a perfectionist helps with things like collecting accurate data. You can't be sloppy in in that area of your work. The two main things

What qualifications do you need for this role?

I have ... I started doing a biology with a biology degree and that piqued my interest in plants. So after that I did a masters in horticulture and then following that degree I did a PhD in plant science. And so they were the qualifications that led to this role.

Where did you study?

I studied first at Macquarie University for my bachelor degree in Science and then I did my Masters of Horticulture and Ph.D. at the University of Western Sydney.

What other roles have you had?

Once I'd finished my PhD, I worked for two years as, as a lecturer at university, and then I discovered this role and I was successful in in getting this role. And I've been in it for 21 years now. So I have been very lucky to spend my whole career in this position.

Where did you grow up?

I grew up in Western Sydney and interestingly enough, I grew up on a hobby farm with my parents and they grew blueberries in the 1980s.

What impact do you see technology having on this work in the next 20+ years?

So technology is improving and new technologies are occurring frequently in as as we develop growing systems in in horticulture. And so as they come up, one of my roles is to take those technologies and test them in the field to see if they're suitable for growers. So that is something that will be ongoing, particularly in the next 5 to 10 years as resources become more scarce and we have a greater need to recycle. For example, the fertilizers that we use in horticulture.

What advice do you have for young people who are interested in this sort of work?

So for anyone interested in research in or technology in horticulture, I would strongly advise you to find people like us, like me, and do work experience with them because it's the best way you can find out exactly what we do and how we work and if you like it.