## THE **SCIENCE** OF **FARMING** writer **SARA CARBERY** // photographer **ALAN STEVENS**

## RESEARCH AND DEVELOPMENT



Good science is so important for farmers, says 25-year-old HOLLY FLAY. "It helps them build their businesses and support their animals, the environment and people for generations to come."

Holly works as a research associate with DairyNZ, a wide-ranging role that sees her planning research, carrying out trials on farms, analysing data and samples, and presenting results to peers, scientists and farmers.

"I really enjoy the variation in the role," she says. "No two days are the same and I get to be involved in some of the bigger-picture science as well as the nitty gritty samples.

"There's some desk-based work and some practical, and I get to spend time outside and with the animals."

Holly grew up on a dairy farm in Te Awamutu so she knows first-hand what being a farmer is all about.

"Agriculture is such a critical part of New Zealand," she says, "and farmers are expected to do so much.

They are part-time vets, animal managers, agronomists, pasture managers, people managers, accountants, financial planners, machine operators, mechanics, builders, welders, health and safety officers . . . and the list goes on!"

Running parallel to her lifelong interest in farming is a lifelong interest in science. "I like asking why, and I like things that make sense."

Holly took Chemistry, Physics, Biology, Statistics and Calculus in Year 13 at Te Awamutu College before heading to Massey University where she combined her two passions to study a Bachelor of Science in Chemistry "with a side of agriculture".

"Although the degree I studied was not entirely agricultural, I took a lot of the agriculture/animal papers to keep the interest in agriculture/dairy industry alive."

Following a summer internship with DairyNZ, Holly applied for a DairyNZ master's scholarship and completed her Master of Science on methane emissions in dairy heifers.

If you're wondering what to do when you leave school, Holly's advice is to choose something you are interested in and can see yourself doing in the future — even if it's just at an industry level and not a specific job.

"You don't have to know exactly which job you might want to do, but if you can narrow it down to the type of work, or the industry, then that helps a lot. The specific job is less important and you can work that out as you go.

"Although my degree wasn't a specific agriculture degree, it has not held me back in getting into the career I have chosen to follow — it is still science and agriculture.

"You don't have to have it all planned out right now."

Holly plans to continue working in research and development, finding opportunities to follow her passion and develop her knowledge, in order to help farmers and optimise resilience in the dairy sector.

## **KEY FACTS**



- **HOLLY FLAY HAS A BACHELOR OF SCIENCE IN CHEMISTRY "WITH A** SIDE OF AGRICULTURE" FROM MASSEY UNIVERSITY. SHE ALSO HAS A MASTER OF SCIENCE, WHICH SHE COMPLETED WITH THE ASSISTANCE OF DAIRYNZ'S MASTER'S SCHOLARSHIP PROGRAMME.
- SHE WORKS AS A **RESEARCH ASSOCIATE** FOR **DAIRYNZ** AND WHILE AT UNIVERSITY, SHE COMPLETED A SUMMER INTERNSHIP WITH DAIRYNZ.



For more information on career options within the dairy sector, visit www.godairy.co.nz and www.dairynz.co.nz/people/ dairy-careers