

## Inspired by studying Agricultural and Horticultural Science at High School, this young high achiever became a vet.

By Catherine Bryant



Veterinarian, and Agricultural and Horticultural Science Student 2012 - 2016, Will MacDonald

The course prepared him well for further study at a tertiary level and went on to gain a Bachelor of Veterinary Science at Massey University. MacDonald explained they still had lectures in soil science, and agronomy, so the Agricultural and Horticultural Science subject at Napier Boys' had given him a really good base of scientific knowledge, as well as learning about Economics and the day to day running of an agricultural business such as a dairy farm.

***"As a vet when you're suggesting different interventions in a business, a lot of the time it comes down to money and affordability. Understanding the economics and showing how your intervention can make it more profitable or can benefit the farmer is really important".***

In 2016, MacDonald and a friend entered the Junior Young Farmers competition in Timaru and came Runners Up. "It was a really great experience and it's something that I would encourage young people at school to get into if they have a Young Farmers Club. Rex Newman and the other students that were in my class encouraged me in Year 11 to join the Teen Ag club which is where I found out about the Junior Young Farmers".

Originally from a sheep and beef farm in the Patoka region of the Hawke's Bay, William MacDonald always had an interest in farming and agriculture. However it was during his 5 year stint of taking Agricultural and Horticultural Science at Napier Boys' High School, under the guidance of teacher Rex Newman, that his passion was nurtured and flourished.

MacDonald took the subject from Year 9 in 2012 to Year 13 and it was the perfect balance of practical and theory that he enjoyed the most.

Being a bright student that excelled in Science, MacDonald found that even early on, the scientific component of the subject kept him engaged. However it also was often paired with a practical assessment or field trip which made the learning even more relatable.

"We went to ARL, a Ravensdown operated laboratory where they do soil testing and pasture analysis. We were doing

an internal assessment where we applied different amounts of fertiliser over different plots of grass. Then we took some of those pasture samples into ARL and had them tested. They analysed for the different components of the pasture compared and measured the pasture growth to establish which rate of fertiliser was the most economic in terms of the yield".

MacDonald found that as a young person, sowing seeds, watching them grow and then harvesting the result was extremely rewarding.

With its broad coverage of topics, Agricultural and Horticultural Science complimented the other subjects that MacDonald took such as Chemistry, Physics, Biology, Economics and Accounting. He was fortunate enough that he was accelerated in Year 10 and able to take Level 1 Maths, Science and Geography. If there had been the equivalent course of Agribusiness that would've been a good fit as well.

As is often the case, a certain teacher can have a profound effect on a students learning and Rex Newman for MacDonald was one of those teachers.

"He's an amazing teacher. Recently I had to take part in some career personal development and was reflecting on why I wanted to be a vet and how I ended up here. I knew that I wanted to do something in Agriculture when I was in High School, and discovered that passion in my Agricultural and Horticultural Science class".

MacDonald goes on to say that Rex was able to set work that was challenging for students at all levels to ensure they would excel. It was Rex's direction and encouragement that led MacDonald on to obtaining an NCEA Agricultural and Horticultural Science Scholarship in 2016.

For students that were more practical minded, he would set up avenues for people to pursue their certain interests in the Primary Industries, such as helping them get into a shearing course.

MacDonald believes that one of the major draw cards to working in the Primary Industries is the vast amount of opportunity. People already working in the sector know that just because you take Agricultural and Horticultural Science doesn't mean you're going to end up on a farm, but how do we get that across to those that don't know much about the Primary Industries at all?

MacDonald gives an example of the variation of jobs available in just one business. Taranaki Vet Centre works alongside the Taranaki Dairy Trust and their farms, used for veterinarian and environmental research studies. These farms still require day to day running, and there are opportunities for people to be employed either as a farmer or a scientist on these farms. "There are specialties for rural accountants and bankers, so having a basic understanding of a farming business can take you a lot of places."

MacDonald is part of the MPI Rural Vet Bonding Scheme which he was made aware of at Massey University. Part of the requirement to be eligible, is that once you leave university you have to be living in a rural area and 80% of your work has to be with either production animals or working dogs or both. In return, you receive \$55k over a period of 5 years. The first instalment is \$33k after completing the third year. Then \$11k in the fourth and the fifth year.

MacDonald always knew that he wanted to be involved with production/farm animals, so thought this would be a good fit for him, and he was right, as he

absolutely loves it. The Taranaki Vet Centre has branches in Hāwera, Manaia, Stratford and Pātea. But MacDonald mostly works out of Manaia. He has been in the bonding scheme with MPI for just over 1 and a half years and feels that he will definitely stay in the rural sector, due to its variation and diverse nature of experiences. "We get to see the highs and the lows. Often you're coming in at a really stressful busy time such as over calving and it's rewarding to be able to fix problems quickly, like birthing a calf".

He goes on to explain that rural vets often work as consultants in different primary industry businesses, provide technical advice as well as doing routine animal health. Taranaki Vets also have an animal nutritionist they work alongside.

Another part of a rural vet's job is to make production plans and provide reproduction consultancy.

MacDonald himself also does one day a week small animal work.

What MacDonald finds most enjoyable about his job is that no two days are the same. "The most rewarding thing is getting out on farm and working closely with clients and building those relationships. We have regular contact with our farmers, and you get to know them quite well". When asked which animal he likes to work with most, he says coming from a sheep and beef background, he is always amazed at how much dairy cows will put up with and how tolerant they are.

"As part of the herd body conditioning work that we do, we walk amongst the herd to do our evaluation. Often the cows are curious and like to come in for a rub or a pat, I enjoy that kind of contact with the animals" There has also been its challenges. In the

beginning it was a steep learning curve as being a large animal vet is a reasonably physical job.

*"There are some days when you're quite physically and mentally exhausted so that can be hard, especially when you see some reasonably difficult things, but you have to learn to deal with it"*

To keep fit and strong, MacDonald keeps up with his fitness, enjoys running and has recently joined the local Hāwera squash club. Never having played racquet sports before, he plays business house squash, mostly for the social side of it. Starting in the rookie division, he is keen to devote more time too squash and eventually get graded.



William and colleague Imogen at one of the Taranaki Vet Centre clinics. The pig had just been stitched up after having been attacked by a dog.