



9

CHAPTER NINE CAREERS IN HORTICULTURE

A career in horticulture is not just about growing, picking and packing fruit. There are an increasing number of highly valued roles available in the scientific, business and technology sectors servicing production horticulture. People enter the kiwifruit industry through many different pathways – from seasonal workers in the orchards or packhouses, through to graduates with specific degrees. At every level there is training available to upskill and build a rewarding career. This chapter includes a career map displaying the wide variety of roles available. There are also biographies of industry entrants to show the pathways they took to get where they are today.

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9.1 HORTICULTURE LEARNING PATHWAYS

A career in horticulture can begin at secondary school. NCEA qualifications in any of the following subjects are a great head start in horticulture:

- Agribusiness
- Agriculture and Horticultural Sciences
- Technology
- Science
- Marketing
- English
- Maths
- Environment studies

Many schools offer vocational-based training through **Gateway** and **Trades Academy** programs for Year 11-13 students. Schools select a program of theory and practical Unit Standards (usually 20 credits/year) that support

students transitioning from school into employment. Students can also undertake work experience to get a taste of what a career in their chosen field (e.g., horticulture) would be like. In schools working with the Primary Industry Training Organisation (PITO), it can be possible for students to gain industry-recognised qualifications such as the NZ Certificate in Primary Industry Skills (Level 2) or the NZ Certificate in Horticulture (Level 1 or 2) while they are at school.

Bay of Plenty students should watch out for “Cultivate Your Career”. This free annual one-day event showcases the broad range of opportunities available in the industry through visits to horticultural businesses, hosted by industry professionals (see students at a previous CYC event on the title page for this chapter).

For more information about Agriculture and Horticulture in schools see the NZASE Resource “Teaching Agriculture and Horticulture” at <https://nzase.org.nz/>

Many successful people in horticulture have started out working in seasonal roles. Employers are always looking out for the right people to offer permanent positions to. Top skills for candidates include:

- Work-ready attitude
- Good communication skills
- Team players
- Problem solvers
- Willing to learn
- Motivated and enthusiastic

Earn as you Learn

Once in employment, there are many pathways for further career development and upskilling. Larger horticultural entities provide their own in-house training. Many others offer cadetships and apprenticeships and support their employees to complete further learning as their roles change.

- The PITO administers apprenticeships in the workplace – students complete their Level 3 & 4 Unit Standards while they are working and are assessed by their employer or a PITO assessor.
- Many regional polytechs or institutes of technology offer the Level 3 & 4 certificate courses separately or as an apprenticeship, with students attending class part-time as well as working.

Te Pūkenga (New Zealand Institute of Skills and Technology) now encompasses the original 16 regional polytechs and the Industry Training Organisations, so in future will provide classroom, workplace, and online learning options for learners.

Horticulture Learning and Career Pathways



Profile: An industry with a wealth of career opportunities

At just 22, Alex Tomkins has landed a role working on projects aimed at improving the business of the country's largest single-site packhouse.

Working with the head of business improvement at Trevelyan's Pack and Cool in Te Puke, Alex's new role as business improvement coordinator will first see her working in the packhouse through the avocado season, then shift to the role of assistant packhouse manager over the kiwifruit season. That will give her an understanding of packhouse operations needed for her new role.



Alex's appointment follows a year at Southern Cross Horticulture where she learnt about kiwifruit orchard development and management through its graduate programme.

Forging a career in New Zealand's food production industry has been her focus ever since spending six of her school years in Asia and seeing the high quality of New Zealand horticulture products in the supermarket.

Alex spent her final two years of school back in New Zealand, studying agriculture and horticulture science. Field trips delving into the kiwifruit industry were lightbulb moments for her as they revealed the scale of the industry and the career opportunities within it.

A Bachelor of Agri Commerce degree at Massey University followed where she was one of a minority who had not grown up in horticulture or agriculture. That didn't hold her back. She was named Rural Student of the Year in the academic section and also selected for the International Horticultural Immersion Programme – including a study tour with other young leaders to Europe and Asia.

When she completed her degree two years ago, she stepped out into the workforce with a goal of working toward supply chain management to get fresh produce to consumers around the world.

"Getting fruit to the consumers is pretty intricate when you are dealing with fresh produce which is perishable," Alex says.

She is still interested in that path but has also discovered numerous careers in horticulture that interest her.

"I knew the kiwifruit industry was big and horticulture in general, but until I began working in it, I didn't know some of those roles even existed."

Alex would like to see the primary industries integrated into school curriculums more than they are now, such as in economics and accounting, so that students can see how they contribute to the New Zealand economy. That may attract more people to a career in the primary industries.

Her enthusiasm for the industry led to her selection for the Food & Fibre Youth Network Council which was created to give young people a voice in shaping the future of the food and fibre sector. It has been an opportunity to engage with the Ministry for Primary Industries and other stakeholders, plus network with a range of young people from different industries.

Each councillor is passionate about their sector, and though Covid-19 has made face-to-face meeting challenging since the network was established, Alex says the group has still been able to share ideas and raise industry issues.

Written by Anne Hardie, first published in the June 2022 issues of the Orchardist and NZGrower magazines

Academic Pathways

Horticulture enterprises are not only looking for horticulture or plant science graduates (although they need them too). These high-value businesses employ business specialists (Accountants, Managers, Marketers, Data Analysts, Human Resource Managers, Lawyers, Logistics and Supply Chain Managers, and more); environmental science specialists (e.g., agronomists, biosecurity officers, laboratory technicians, sustainability officers, soil scientists); and increasingly technology and engineering graduates as more automation is adopted. There are many opportunities for international placements and travel within the horticultural exporting companies.

Undertaking course-related work experience, or even a student internship, whilst studying at university can be a great entryway to the horticulture industry. You can discover aspects of the industry that interest you, gain experience, and give those businesses the chance to see if you would be a good fit for their organisation.

The Careers Map on the following two pages demonstrates the wide variety of roles available in the kiwifruit industry, and the multiple pathways people can take to enter, both vocational and academic.

There are many scholarships available to help with the costs of studying. To find out more go to: <https://www.growingnz.org.nz/find-your-fit/scholarships>

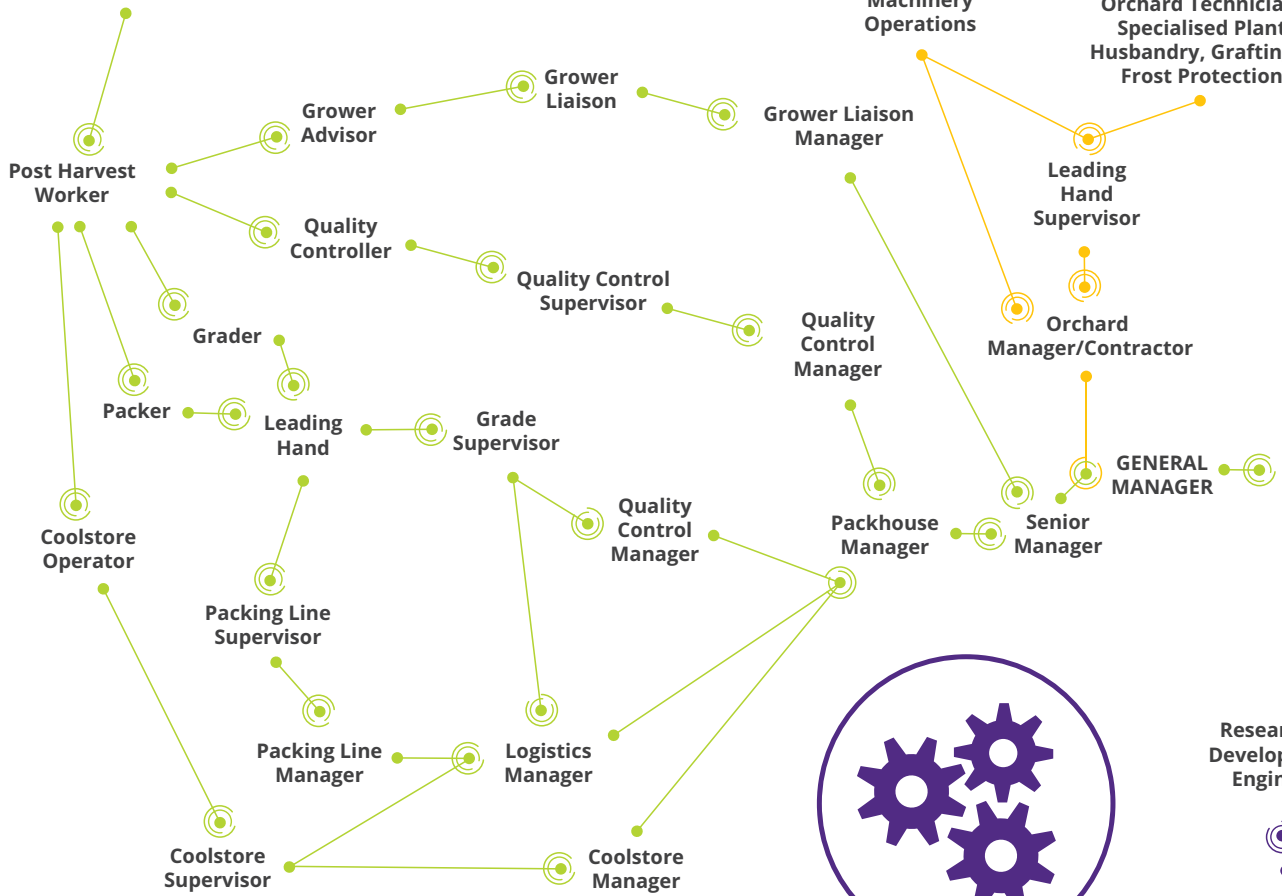
Below:
Robotics Plus Kiwifruit
Picking machine developed
by scientists and engineers
working with Waikato and
Auckland Universities.



9.2 CAREERS MAP

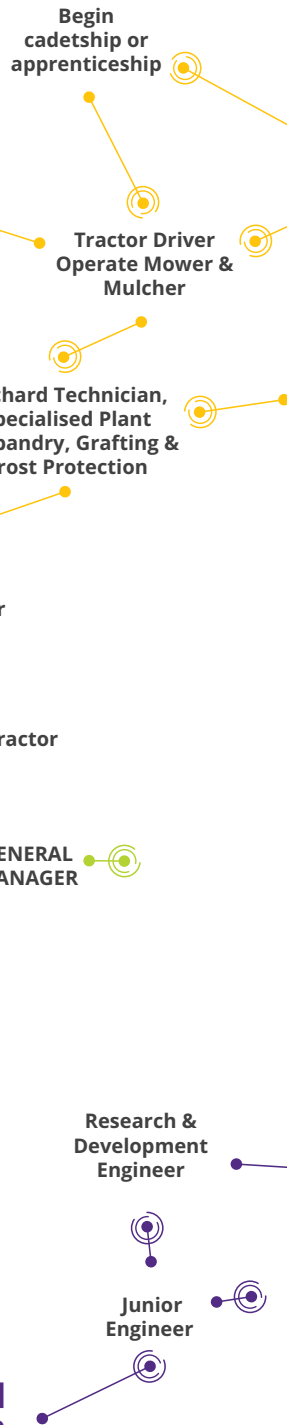


START HERE FOR A POST HARVEST CAREER



START HERE FOR AN ENGINEERING CAREER

OBTAIN A ENGINEERING DEGREE:
 ROBOTICS/AUTOMATION
 SOFTWARE DEVELOPMENT
 PRODUCT DEVELOPMENT



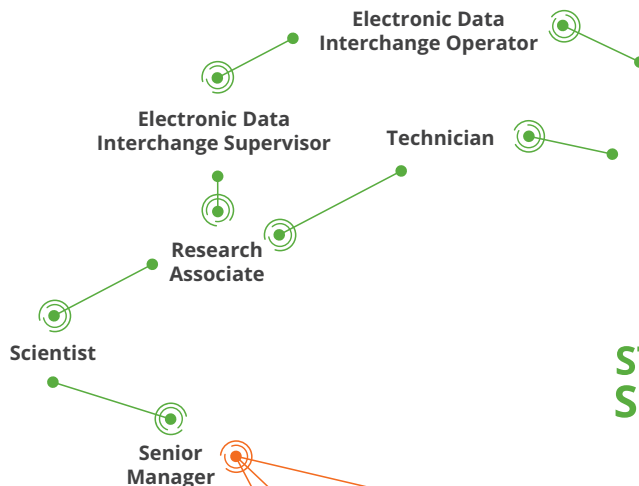


START HERE FOR AN ORCHARD CAREER

Orchard Worker - Harvesting, Plant Care and Construction

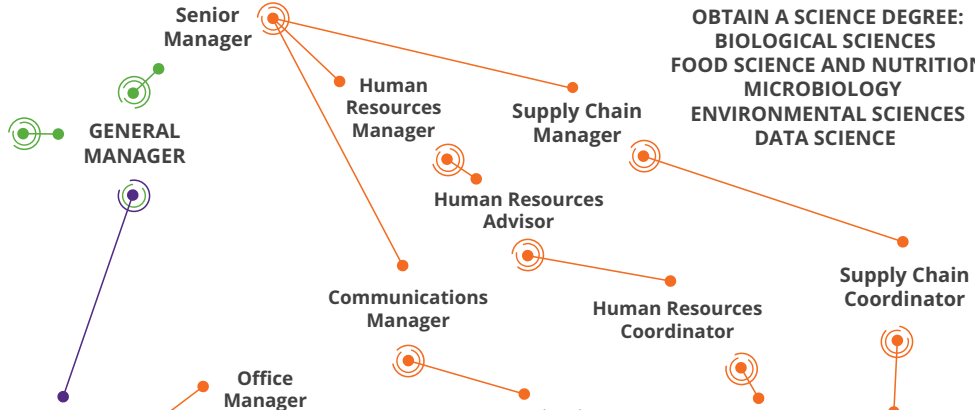


GROWER DIRECTOR CEO



START HERE FOR A SCIENCE CAREER

OBTAIN A SCIENCE DEGREE:
BIOLOGICAL SCIENCES
FOOD SCIENCE AND NUTRITION
MICROBIOLOGY
ENVIRONMENTAL SCIENCES
DATA SCIENCE



START HERE FOR A BUSINESS CAREER

OBTAIN A BUSINESS DEGREE:
HUMAN RESOURCES COMMUNICATION
MARKETING
FINANCE/ACCOUNTING
BUSINESS ADMINISTRATION
SUPPLY CHAIN



9.3 CAREER PROFILES



CAMPBELL WOOD

Role/Organisation: **Director of Pivot Horticulture**

Pathway: **Cadetship/Apprenticeship/Further Industry Study**

What I enjoy about this industry is the diversity of working with lots of people coming from a range of cultures and places around the world. The kiwifruit industry offers a huge range of professional development opportunities which have helped advance my career and I am passionate about attracting young people to the industry so that they too can experience the amazing opportunities that are available.

What I like to tell younger versions of myself deciding what career path to take is this:

- Knuckle down and stick to an industry - ride out the highs and multiple lows
- Do the hard yards - work harder than expected, invest in doing more than required, don't be afraid "to sweep the factory floor"
- Push yourself out of comfort zone on a regular basis - take on challenges where you think you're out of your depth and own the outcome be it positive or negative

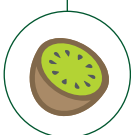


JEFFREY BENFELL

Role/Organisation: **Human Resources Assistant, Apata**

Pathway: **Direct Employment**

After 20 years in the travel industry, I was made redundant at the start of the Covid-19 pandemic. I made a call to a friend in the industry that led to me being hired by Apata as a human resources assistant, starting just as the country headed into lockdown Alert Level 4. My role covers the full scope of human resources, from recruitment to attendance, so I was able to transfer many of my skills I learned in decades in customer service. Almost anyone can work in some capacity in kiwifruit. For stackers, it's quite a physically demanding job. For graders, it's mentally focused. And for tray preparation and packers, it takes a lot of skill, thought and speed. Apata pack both kiwifruit and avocados. Because we have both it keeps a lot of our people in very good employment for 10 months of the year.

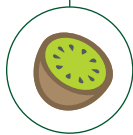


WAI DE FLAVELLE

Role/Organisation: **Inventory and Logistics Coordinator at EastPack**

Pathway: **Direct Employment**

I started out in the industry working in the packhouse at EastPack located in Te Puke and within those five years I have worked in a range of roles including Packer, Packhouse Team Leader, Allocations Coordinator, Field Technician, Crop Assessment Team Leader, Inventory Assistant and finally to my current role as Inventory and Logistics Coordinator. I have found that in this industry, if you are a hard worker you can progress very quickly! There are so many opportunities within the kiwifruit industry to learn, grow and develop a meaningful career.

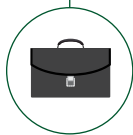


STACEY MARINO

Role/Organisation: **Orchard Supervisor, Kiwifruit Investments**

Pathway: **Direct Employment**

I started as a packer and then a grader in the packhouse. After my first harvest I stayed on and did the re-pack season. The following year, I got asked to be a packaging supervisor, teaching others the skills I learnt in packing and grading. The industry has an array of jobs and so many areas to branch off in, whether it's in the packhouse or the orchard. I tried fruit thinning the next year and loved it even more than being in the packhouse because I enjoy being outdoors. Supervisors and managers will spot you out and advance you. They put a lot into helping people, and giving them different skills and areas to work in. I really enjoy the work because it's always changing, and I enjoy teaching people. I love learning new things, and the industry is always evolving.



GAVIN STAGG

Role/Organisation: **Labour Coordinator, New Zealand Kiwifruit Growers Incorporated**

Pathway: **Direct Employment**

Until I joined the kiwifruit industry, the longest I'd held a job was two years. In this business, no two days are the same, so it keeps me interested! Prior to kiwifruit, I trained as a chef, joined the army, and held various other positions, mostly managing people. My first role in kiwifruit was as an employment officer for a packhouse. As my industry knowledge grew, I was promoted to Packhouse Operations Manager in a year. From there, I secured a new role as an Operations Manager for a different packhouse which involved managing the entire site. I left that role in early 2019 to start my current role with NZKGI. The highlight of this role is the different people that I get to interact with, from contractors, growers and packhouses through to government agencies.



MEGAN FOX

Role/Organisation: **Sustainability and Graduate Lead, Southern Cross Horticulture**

Pathway: **University Degree**

I love working in the kiwifruit industry because there is a huge network of supportive people both within my workplace, and externally, that are always willing to lend a hand or impart valuable knowledge. Further, it is an exciting industry to be a part of as there are a lot of opportunities to move laterally across the industry as well as huge potential to move up very quickly. Currently we are planting 700ha per year of G3, and the average orchard manager is managing 50ha, meaning we need to hire 14 new orchard managers every year to help with our growth- the demand for skilled labour is huge. I would recommend anyone to consider entering the kiwifruit industry to gain access to some amazing career opportunities!



9.4 UPSKILLING



Young Grower Competition

There are many opportunities for development and upskilling of people in the kiwifruit industry and the wider horticultural sector. Since 2007, Horticulture New Zealand has run the annual Young Grower of the Year competition. Young fruit and vegetable growers from around the country compete in regional heats, testing their horticultural skills and knowledge in both practical and theory challenges. The winners of the regional competitions then compete in the national final. Young Grower pushes contestants out of their comfort zone and teaches them valuable new skills along the way. The competition provides exceptional professional development and networking opportunities, providing a massive career boost to all who enter. Criteria for entry:

- Must be currently working full time in the fruit or vegetable industry in an organisation that is closely associated with growing.
- Must be 30 years of age or under as at 31 December.
- Three years practical work experience in the industry.
- Must be a New Zealand citizen or hold a current New Zealand residency permit.

Profile: Opportunities abound for Youth in horticulture

Erin Atkinson was the first woman to win the national Young Grower of the Year, in 2017.

Reflecting on her national title win more than four years ago, Erin says the Young Grower of the Year competition gave her the ability to continue to do the job she loves – horticultural promotion. Since winning, she has become the chair of the Bay of Plenty Young Fruit Grower Upskilling Committee that organises the regional Young Grower competition but also runs educational events.



“We do a ‘Cultivate Your Career’ event, which unfortunately we haven’t been able to run due to Covid-19, but we’re still trying to do all of that stuff to bring in those high school students.”

Erin works as the Apata GROW manager for Apata Group Ltd. Apata GROW offers orchard management for kiwifruit growers specialising in providing on-orchard and technical services to maximise crop performance. The role offers plenty of opportunities to develop Erin’s skills and career.

“We’ve got an amazing culture here and they’ve been really great in terms of pathways. We’re just going from strength to strength developing those career pathways for people. It’s been fantastic. I’ve had three job titles in the seven years that I’ve worked here. Each time I’m working up to a different role.

“It’s been really helpful for us recruiting because if you can see people that are staying here and have moved through the company then I think it’s a good sign that the company is doing well.

“It’s the longest job that I’ve had to be honest – and I’m still not finished. There’s heaps of stuff I want to do within the company.”

Thinking back on her experience with the Young Grower competition, Erin says it gave her an opportunity to brush up on her existing skillset while developing new ones.

“It really helped me tap back into things I hadn’t done for a while. I found it really cool that I got to recap the soil science and nutrient management knowledge. The business aspect was great as well because you got some insight into the business world, things you wouldn’t normally cover in your day-to-day jobs.

“It’s helped me with my current role in running a division as I have to look at balance sheets, look at profit and loss, budgets and actuals as well.”

Erin entered the regional competition twice, before taking out the title the second time around. If a young horticulturalist is considering taking part in the event but isn’t quite sure, she urges them to give it a go.

“It’s an amazing opportunity to meet like-minded people. It’s a great way to learn new skills that you otherwise wouldn’t have. The professional development that you get attached to these competitions as well, through to the sponsors and what they have to offer.

“It gave me a really good insight into what a great industry we are part of. This industry is really big on helping young people through it.”

Taken from an article by Helena O’Neill. To read the whole article see the March 2022 edition of the Orchardist magazine at <https://www.hortnz.co.nz/news-events-and-media/magazines>

9.5 AGRIBUSINESS IN SCHOOLS

In 2013, St Paul's Collegiate (Hamilton) designed and developed a pilot Agribusiness Programme to encourage their own secondary students to consider career pathways in the primary sector. In the first year it attracted 44 students across years 12 and 13. From this beginning, the school established an Agribusiness Advisory Group made up of key representatives from across the primary sector and attracted business partners to help fund the work they were undertaking. With input from these groups the Agribusiness national curriculum was developed, with achievement standards at NCEA level 2 and 3, supported by the Ministry of Education (MOE). This is the only secondary curriculum developed in conjunction with industry rather than written by the MOE.

To date St Paul's has made the Agribusiness programme available to 97 secondary schools in New Zealand, with the majority in urban rather than rural areas. Many of these schools have also seen an uptake in Ag/Hort as a subject, with the recognition that the primary sector is a dynamic growth area with many opportunities. There have been corresponding increases in entrants to related university courses. Now in its 8th year, the primary sector is starting to see young graduates from the programme entering the workforce.

For more information about the Agribusiness programme see
<https://agribusiness.school.nz>



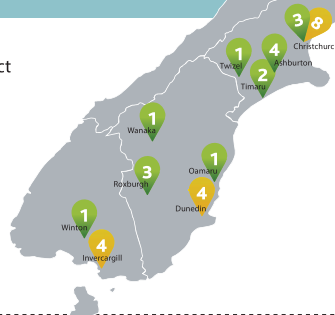
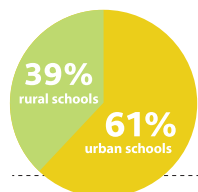
Agribusiness in Schools

DELIVERING AGRIBUSINESS TO NZ SECONDARY SCHOOLS

IN 2014 WE RECOGNISED THE NEED TO ESTABLISH A FORMAL AGRIBUSINESS PROGRAMME, WITH A GREATER VISION; TO TAKE OUR PROGRAMME INTO SCHOOLS RIGHT THROUGHOUT NEW ZEALAND. THE SUCCESS OF THE PROGRAMME IS EVIDENT TODAY.



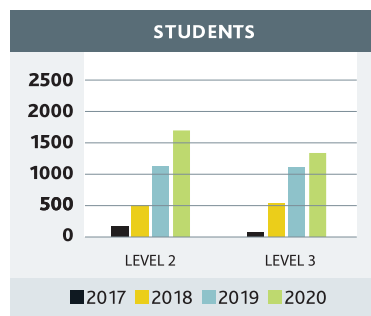
97 Agribusiness is now a key subject option in 97 New Zealand schools.



1	Whangarei	2	Rotorua	1	Wellington
1	Maungaturotu	1	Otorohanga	1	Blenheim
1	Helensville	3	Taumarunui	1	Nelson
14	Auckland	1	New Plymouth	3	Christchurch
1	Pukekohe	1	Hawera	8	Christchurch
1	Ngatea	1	Whanganui	4	Ashburton
1	Katikati	2	Marion	2	Timaru
1	Tauranga	1	Feilding	1	Twizel
3	Tauranga	4	Palmerston North	1	Wanaka
1	Te Puke	1	Gisborne	1	Oamaru
1	Morrisville	4	Napier	3	Roxburgh
7	Hamilton	1	Napier	4	Dunedin
2	Cambridge	2	Masterton	1	Winton
1	Putaruru	4	Wellington	4	Invercargill

The numbers of students learning and schools teaching Agribusiness have consistently increased over the last four years.

YEAR	LEVEL 2 STUDENTS (YEAR 12)	LEVEL 3 STUDENTS (YEAR 13)
2017	173	87
2018	529	570
2019	1121	1120
2020	1728	1329



**Unit standards and achievement standards are two types of assessments schools use to assess student knowledge. Both standards specify what a candidate needs to know, do, and understand.*

Unit standards are competency based and usually vocational based assessment, developed by the relevant industry training organisations such as the PrimaryITO. Schools need to be accredited to assess unit standards by the relevant industry training organisation. There are just two grades; Achieved (A) for meeting the criteria of the standard and Not achieved (N) if a student does not meet the criteria of the standard.

Achievement standards are based on assessing New Zealand curriculum developed by the Ministry of Education. Achievement standards are measured by four grades; Achieved (A) for a satisfactory performance, Merit (M) for very good performance, Excellence (E) for outstanding performance, and Not achieved (N) if students do not meet the criteria of the standard.

Partnering with secondary schools in New Zealand to teach Agribusiness



Profile: Pioneer Student of Agribusiness

After growing up on a dairy farm and kiwifruit orchard in the Bay of Plenty, Kate Wilkins thought she would never pursue a career in horticulture. But after studying Agribusiness at St Paul's Collegiate School, she discovered the world of opportunity in New Zealand's primary sector.

The 25-year-old is now an Extension Delivery Specialist at Zespri, the world's largest fruit marketer.

The company sells kiwifruit to more than 50 countries around the globe and has licensed growers in Italy, France, Japan, and South Korea.

"Having grown up around agriculture and horticulture I wasn't sure if I wanted a career in the sector. It was 'normal' and not exciting to me, and after working in the summer holidays in the kiwifruit orchard I didn't want to ever work in an orchard again," laughs Kate.

Kate studied Agribusiness in Year 12 and 13 at St Paul's, starting in 2014 when the course was still in its infancy.

St Paul's established the agribusiness programme to meet the primary industry's needs for engaged, well-qualified young people, enthusiastic about their career opportunities in the primary sector. NZ Kiwifruit Growers Inc have partnered with the Agribusiness in Schools project which is now being taught in 97 schools nationally, catering to 3057 students in 2020.

Kate had always enjoyed economics and accounting and with a farming background she says Agribusiness seemed like a natural progression for her.

"Studying Agribusiness at St Paul's really opened my eyes to the multitude of career opportunities within the primary industry, which didn't just include working out on an orchard or on farm," she says.

Kate found the course offered students access to industry leaders and she remembers guest speakers including Richard Burke, General Manager of LeaderBrand, which is New Zealand's most diverse horticulture business. She says their presentations and the curriculum provided insights across the entire value chain of the primary industry.



After finishing high school, Kate enrolled for a Bachelor of Commerce at Canterbury University, but by the second semester she decided to shift to Lincoln University to study a Bachelor of Commerce Agriculture.

“I could see a clear career path. It was economics and accounting, but it also took in the supply chain, animal science, plant science and soil science. It gave me a sense of purpose around what I wanted to do,” says Kate.

When she graduated in 2017, Kate returned to work on her family’s farm. She set about establishing a new 12-hectare organic gold kiwifruit orchard to add to the six hectares of gold and green orchards they already had.

It was while establishing the new orchard Kate found her niche.

“We had a lot of people through the orchard at that time, including people from Zespri, because what we were doing was new and fresh.”

Kate was offered a role in Zespri’s Extension team.

As an Extension Delivery Specialist Kate says she is now focused on creating positive change in New Zealand’s kiwifruit industry.

“We’re supporting and inspiring growers to produce the world’s best kiwifruit, whether that’s through changes in sustainability practices, production practices or even health and safety. No two days are the same,” says Kate.

She loves that it’s not a typical office job and that she can get out in the field and see the impact her work is having on growers.

“I love the interaction with growers and using my knowledge to provide them with advice or solutions to problems. One day I can be running a field day and the next day I’m writing a newsletter or talking to growers about nutrient management and irrigation methods.”

For anyone thinking about taking Agribusiness Kate encourages them to go and research the jobs on Seek.

“Search roles in Agribusiness and see the jobs that come up. You’ll soon realise it’s not all on a farm or in an orchard,” says Kate.

