

AGRICULTURE CAREERS



**Lincoln
University**

Te Whare Wanaka o Aoraki
AOTEAROA • NEW ZEALAND

New Zealand's specialist land-based university



Library, Teaching and Learning

WHAT IS AGRICULTURE?

Agricultural and horticultural land make up over 40%¹ of New Zealand's land: this places land-based commercial operations at the heart of the New Zealand economy. New Zealand's rural places are populated with farms and businesses which supply products, services and knowledge to New Zealand and the world. To do this, the rural sector is supported by public and private sector enterprises, all of which need trained employees to operate. This makes agriculture the sector to realise any number of careers. Lincoln University students graduate ready for careers along the agricultural value chain - from farming to marketing, education to ecology, or science to finance.

Students of agriculture at Lincoln University can build on their interest of farming systems and the environment by tailoring their study of agriculture to commerce, science or agribusiness. The focus the degrees have on both commerce and technology is relevant to New Zealand's agricultural practices, the real-world application of which keeps the primary production sector both globally competitive and sustainable.



AGRICULTURE IN NEW ZEALAND AND THE WORLD

Both local and global demand for and production of food is expected to grow². To provide for the needs of increasing populations, particularly in developing countries, agricultural and horticultural leaders with technical expertise are sought-after on the world stage. With appropriate levels of training and industry experience, many graduates direct their career towards consultancy, management, production, research or strategic operations- all of which can start local, or take graduates global.

Agricultural and horticultural systems are becoming increasingly large scale, and sophisticated. Technology and professionalism are transforming the industries and driving change at a rapid pace³. From farming software systems to autonomous vehicles, more and more farming operations will see technology as a way to improve efficiency and sustainability. The uptake of technology requires both scientific data as the basis for sound decision-making, and professionals who can manage and facilitate the on-farm application of technology based practices.

Graduate recruitment has not kept pace with natural attrition rates (due to retirement), so the sector is expected to need many newly-trained employees with innovative ideas and a passion for the land. Lincoln University graduates are sought after for their ability to see the 'big picture'- from the specifics of production, to global trends. Presently there is demand for highly-skilled roles such as agricultural scientists, and for supervisory and management roles. Post-graduate study can further enable specialisation in a field of interest, and give graduates a head-start in the employment market.



SKILLS AND KNOWLEDGE DEVELOPED BY STUDYING AGRICULTURE

The types of skills gained from studying agriculture are highly valued in the industry. Students develop agricultural knowledge around an area of focus, such as, agricultural science, agricultural commerce or agribusiness. The degrees are underpinned by a broad foundation of subjects giving students a range of knowledge areas to draw from in their careers. With farms now increasingly operating as businesses, many students are incorporating a commercial aspect into their degrees.

The applied nature of the coursework at Lincoln University gives graduates a range of practical skills that are transferable directly to the workplace. Lincoln University staff work directly with industry employers to provide students work experience with potential employers during the course of their study. Employers in the sector appreciate that Lincoln graduates come equipped with sector-specific skills and knowledge, as well as experience in agriculture and agribusiness practices.

Employers seek well-rounded, engaged graduates with a strong work ethic. As in any sector, employers typically value those who have a professional attitude to their work. This includes good communication (including the ability to communicate to groups, as well as effective interpersonal and written communication), respect, self-motivation, initiative, time management and flexibility. The importance of these basic skills cannot be underestimated, even in voluntary roles, as future job opportunities often arise from a good reputation and a varied network of contacts.

The following skills and knowledge are valued in agriculture roles:

Effective communication skills
Pastoral management skills
Knowledge of Resource Management Act and other legislation affecting farming
Interpersonal skills and the ability to interact professionally with a range of people
Knowledge of data collection and storage systems
Knowledge of water cycles, irrigation and reticulation systems
Skilled in 'big picture' thinking
IT skills
Knowledge of environmental systems
Knowledge of integrated farming systems and operations
Mathematical and analytic skills for experimentation
Presenting research findings

²Food and Agriculture Organization of the United Nations, retrieved from <http://www.fao.org>

³Farming Industry News, retrieved from <http://farministrynews.com/farm-equipment/20-technologies-changing-agriculture>

WHERE CAN AGRICULTURE GRADUATES FIND WORK?

Potential places of employment for agriculture graduates extend far and wide. Careers are available in cropping, horticulture, sheep and beef, wool, meat and dairy sectors.

- Consultancy services (e.g., Franklin Group, Nimmo-Bell Ltd., The Agribusiness Group, FarmRight, Compass Agribusiness, DairyNZ Ltd.)
- Government (e.g., Ministry for Primary Industries (MPI),ASUREQuality, Landcorp Farming)
- Finance and insurance (e.g., Rabobank, BNZ, ANZ, Westpac, FMG, Heartland Bank, NZX Agri)
- Exporting and marketing (e.g., Export NZ, NZ Trade and Enterprise, Miraka, New Zealand Shipping Federation, Fonterra, ANZCO Foods, Blue Sky Meats, Oceania Dairy)
- Self-employment or contracting (e.g., silage, baleage or vineyard services)
- Plant, equipment, and machinery (e.g., ICS Manufacturing Ltd., Holdem Cattle Handling Equipment Ltd., Agtrac 2020 Ltd., Carrfields)
- Weed and pest control (e.g., NZ Biosecurity Institute Inc., Target Pest Enterprises)
- Fertiliser and chemical industry (e.g., Ravensdown, Nutritech International Ltd.)
- Horticulture and viticulture industries (e.g., Zespri International, Southern Paprika Ltd., Delegat's Wine Estate)
- Grain and seed industry (e.g., NZ Seedlab, PGG Wrightson, Seedlands, Cropmark Seeds, Agriseeds, New Zealand Grain and Seed Trade Association)
- Meat, cattle, wool (e.g., Blue Sky Meats, Beef and Lamb, ANZCO Foods, Segard Masurel, Miraka)
- Education, training and recruitment (e.g., Lincoln University, NZ Qualifications Authority)
- Research (e.g., New Zealand Crown Research Institutes such as AgResearch, Plant and Food Research, or Landcare Research; Dow AgroSciences, Livestock Improvement (LIC))
- Processor and manufacturers (e.g., Fonterra, Talleys, Synlait Milk, Heinz Wattie's, Silver Fern Farms, Tegel Foods)
- Farm Management (e.g., Dairy Holdings Ltd., Canterbury Holdings)
- Farmer and industry organisations (e.g., Federated Farmers, Horticulture New Zealand)
- Farmer Cooperatives (e.g., Farmlands, Ashburton Trading Society)
- Livestock Management (e.g., NZ Agribusiness Centre, Rural Solutions)
- Environmental and biological production organisations (e.g., Department of Conservation (DOC), BioGro New Zealand, Environmental Protection Authority)

AGRICULTURE JOB TITLES

Account Manager - Agribusiness Sales
Advisor- Plant Exports
Agri Manager
Agribusiness Consultant
Agricultural Consultant
Agricultural Contractor
Agricultural Technician
Agricultural/Horticultural Scientist
Agri-tourism Operator
Agronomist/Research Agronomist
Animal Health/Nutrition Specialist
Area Manager - Agribusiness Sales
Assistant Production Specialist
Auditor – Food and Dairy
Breeder
Business Analyst
Client Manager (Rural Finance)
Communications Officer
Consulting Officer
Customs Officer
Environmental Consultant
Extension Manager
Farm Accountant
Farm Consultant
Farm Manager
Farm Operations Manager
Farm Technician/Hand
Fertiliser Representative
Field Services Representative (e.g., grains or chemicals)
Finance Officer
Geneticist
Grower Liaison
Head Shepherd
Horticulture Exporter
Human Resources Manager
Irrigation Consultant/Designer/Engineer
Journalist
Laboratory Technician
Lecturer
Livestock Agent/Representative
Livestock Identification and Business Support Specialist
Marketing and Sales Assistant/Manager
Media Spokesperson
Nutrient Specialist
Pastoral Manager
Plant Breeding Technician/Plant Breeder
Policy Advisor/Analyst

Production Manager
Productivity Officer/Manager
Project Manager/Officer
Research Assistant/Technologist/Manager
Researcher
Rural Banker
Rural Manager- Insurance
Rural Property Valuer
Sales Representative
Seed Production Technician
Sharemilker
Soil Nutrition Consultant
Soil Scientist
Stock Manager
Sustainability Developer
Sustainability Services Manager
Technical Representative
Territory Manager
Viticulturist
Wool Buyer
Wool Classifier



PAY RATE INDICATIONS: FULL TIME EQUIVALENT (FTE) \$NZ PER ANNUM⁴

Most starting salaries for graduates of bachelor degrees fall between 40,000 - 55,000 per annum. Entry level jobs are stepping stones to roles with increased responsibilities and remuneration. Your employability is affected by all of your life experiences, be they employment related, or the transferrable skills and competencies gained from community involvement, volunteer work, or previous work or study- all of which can grow competency, expand networks, and demonstrate enthusiasm to future employers.

In some cases roles offer remuneration extras such as bonuses or other incentives, medical or health insurance, and the use of a company vehicle or smart phone.

Job Title	Indicative Pay
Area Manager- Agribusiness Sales	50,000 – 80,000
Farm Technician/Agricultural Technician (early career)	40,000 – 65,000
Farm Technician/Agricultural Technician (late career)	55,000 – 85,000
Fish Farm Technician (early career)	38,000 – 70,000
Sheep/Beef/Grain Farm Manager	50,000 – 80,000
Dairy Farm Manager	60,000 – 75,000
Customer Services Representative	34,187 – 49,890
Territory Manager	54,676 – 96,886
Regional Sales Manager	58,645 – 109,009
Agricultural Consultant (early career)	45,000 – 80,000
Agricultural Consultant (late career)	80,000 – 150,000
Irrigation Engineer (early career)	45,000 – 50,000
Irrigation Engineer (late career)	70,000 – 100,000
Field Services Representative (often includes use of vehicle)	45,000 – 70,000
Environmental Consultant	50,000 – 90,000
Rural Banker (early career)	45,000 – 60,000
Rural Banker (late career)	75,000 – 120,000

⁴ <https://careerhub.lincoln.ac.nz/students/jobs/search>; <http://www.getahead.co.nz/the-real-world/careers/agri-business/#52>; <https://www.seek.co.nz/jobs>; http://www.payscale.com/research/NZ/Employer=PGG_Wrightson/Salary; <http://www.mbie.govt.nz/info-services/employment>; <https://www.careers.govt.nz/jobs-database>; <http://www.universitiesnz.ac.nz/files/University%20Staff%20Academic%20Salaries%20and%20Remuneration%20-%20Final.pdf>; <http://www.otago.ac.nz/humanresources>; <http://www.canterbury.ac.nz/hr>

AGRICULTURE TASKS

Professionals working in the agriculture sector are expected to wear many hats in their day to day work. The following lists indicate tasks one might encounter as a consultant, banker, and agronomist.

a) Agricultural/Farm Consultant Tasks

Early career farm consultants benefit from a broad knowledge of farming and environment systems. As careers in this field progress, developing a specialisation enables later-career consultants to hone technical skills in one particular area. The following table includes the types of tasks undertaken by farm consultants.

Understand and describe to clients the financial ramifications of farming decisions
Research and advise clients on farming operations
Assist clients with business and strategic planning
Research factors that affect crop production, pasture growth and animal breeding
Prepare feasibility studies and reports
Provide legislative advice, e.g. Resource Management Act
Design and implement risk minimisation strategies e.g., preparing for natural disasters, droughts, or pests and diseases
Prepare property management reports
Assess and report on farm viability

b) Rural Banker

Rural Bankers are recruited directly from university and have the support of mentors while they learn credit and banking systems. Once working directly with a portfolio of clients, Rural Bankers may undertake the following tasks.

Support rural customers with banking and finance needs
Develop and maintain good relationships with clients
Provide tailored financial advice to clients
Tailor-make complex lending packages for clients
Visit farms and/or rural businesses
Advise clients on meeting regulatory requirements
Meet sales targets
Prepare financial reports for clients, and for management
Calculate value of assets
Calculate and impose lending limits
Develop proposals for buying/selling farming businesses
Provide business formation advice

c) Agronomist

During the course of their work, agronomists research and develop strategies to improve crop yields. The ultimate goal is to work scientifically to produce the finest crops, on the most consistent basis, for any situation. Agronomists may undertake the following tasks.

Research and develop strategies to improve crop yields
Conduct personal and telephone consultations with farmers
Examine and report on pest and disease issues affecting crops
Develop plans to combat crop or soil pests and disease
Make improvements to next generation crops
Crop budgeting, rotating and planning
Running trial programmes
Soil sampling
Make recommendations regarding fertiliser, seed and chemical applications
Irrigation scheduling
Study a farms crop production
Discern best ways to plant, harvest, and cultivate plants

Job tasks are role-specific, so the above is an indication only. For more information on roles, registered Lincoln University students can search Lincoln CareerHub (including expired jobs) for job titles similar to those they are interested in. Job descriptions, including tasks and skills required, are often available.



GRADUATE PROFILES



LACHIE BOLEYN

*Bachelor of Agricultural Science
Arable Representative, PGG Wrightson
Seeds*



CHARLOTTE FIELD

*Bachelor of Commerce (Agriculture)
Nutrient Specialist, Ballance Agri-
Nutrients*



JAMES DIXON

*Bachelor of Agricultural Science
Technical Tour Manager, Farm To Farm
Tours*



Michelle Ash

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INDUSTRY BODIES

Membership of an industry specific body enhances the professional status of students and employees. By joining a professional body, members can research career options, access training and events, and network and collaborate with industry colleagues at all levels.

Examples of agriculture industry bodies include:

Federated Farmers

www.fedfarm.org.nz

Horticulture New Zealand

www.hortnz.co.nz

Royal New Zealand Institute of Horticulture

www.rnzih.org.nz

New Zealand Grasslands Association

www.grassland.org.nz

New Zealand Agricultural and Resource

Economics Society

www.nzares.org.nz

The New Zealand Institute of Agricultural & Horticultural Science

www.agscience.org.nz

Irrigation New Zealand

www.irrigationnz.co.nz

New Zealand Grain and Seed Trade Association

www.nzgsta.co.nz

New Zealand Institute of Forestry

www.nzif.org.nz

National Beekeepers Association of New Zealand

www.bpsc.org.nz

New Zealand Society of Soil Sciences

www.nzsss.science.org.nz

Beef and Lamb New Zealand

www.beeflambnz.com

NZ Institute of Primary Industry Management

www.nzipim.co.nz



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