

Practical Work Handbook



LINCOLN
UNIVERSITY

TE WHARE WĀNAKA O AORAKI

Diploma in Agriculture



Things grow when the conditions are right.

This is true for industry and agriculture, and it's most certainly true for people. At Lincoln University, helping you to grow is what we're all about.

And we encourage you to do it your way, with diverse learning options that fit your ambitions in an environment that allows you to flourish.

We partner you with industry to prepare you for the real world and to plant the seeds of a rewarding future.

So when the time comes, you're ready to go out there and grow the future for yourself and others.

**Welcome to Lincoln University.
A place to grow.**



Contents

Introduction	1
Why Practical Work?	2
Practical Work Requirements	2
Practical Work Guidelines	2
Securing Practical Work	3
Carrying Out Practical Work	3
Recording Practical Work	4
Report Guidelines	
Diploma in Agriculture Property Report Format	5
Allied Industry Report Format	8
Farm-Support Rural Contractors Report Format	9
Practical Work Record Sheets	

Practical Work Handbook

Diploma in Agriculture

Practical Work is essential to the Diploma in Agriculture as it allows you to gain hands-on work experience in a range of industries.

After completing your Practical Work, you will need to write a descriptive report about your experience. There are report guidelines in this handbook to help you.

You are expected to keep a daily work diary to record why, when, and how you carry out your tasks.

Familiarise yourself with this handbook, as you will need to refer to it throughout your diploma or degree.

If you want to discuss any aspect of Practical Work, contact the Practical Work Co-ordinator in the Student Administration area or email practicalwork@lincoln.ac.nz



For enquiries relating to Practical Work please contact:

Kylie Gordon
Practical Work Co-ordinator
Ground Floor, Georges Forbes Building
Student Administration
P O Box 85084
Lincoln University Lincoln 7647
T: (03)4230061
E: practicalwork@lincoln.ac.nz

Why Practical Work?

Practical Work will:

- **Complement your studies and enhance the marketability of your qualification**
- **Provide you with an opportunity to experience new learning environments**
- **Expose you to the appropriate industry environment, including its technical, economic and social environments**
- **Teach you to perform a range of tasks specific to the industry environment including skills in observation, information-gathering, data analysis, and report writing**
- **Equip you with more knowledge of industry employment opportunities.**



Note: Your daily work diary will be an invaluable resource when you come to compile your report. Remember to record why, when and how tasks are performed.

Practical Work regulations for the Diploma in Agriculture

Before graduating, you will need to complete a total of 12 weeks (or an approved part-time equivalent) of approved practical work. You can claim between one and three different practical work placements, with a minimum of 4 weeks in any workplace.

You must email one satisfactory Practical Work report to practicalwork@lincoln.ac.nz by 25 July of the year that you complete the work period. An employer form verifying the work period also needs to be handed in with the report.

The guidelines for the report, and the employer forms, are contained in or emailed this handbook.

Practical Work Guidelines

Any appropriate work that you have completed since leaving secondary school may be considered for Practical Work credit. If you are unsure if the work that you have done is suitable, please discuss it with the Practical Work Co-ordinator.

Practical Work must take place on a commercial enterprise. Use the following categories as a guideline.

- Sheep properties – evaluated on a case-by-case basis but there must be enough ewes or equivalents in finishing stock to make it a worthwhile learning experience
- Dairy – as above
- Beef – as above
- Deer – as above
- Crop properties – must be at least 40 ha, with at least two cash crops
- Equine properties – must be a commercially viable horse enterprise and if the property is part of another farm, it needs to generate at least 40% of the total income
- Finishing properties – must be a commercially viable unit
- Dairy support properties – must be a commercially viable unit
- Allied industry – examples include agricultural seed or fertiliser businesses, research and development, or rural banking
- Fruit production – examples include pip fruit, summer/stone fruit, berries, grapes, nuts, citrus, sub-tropical fruit
- Vegetable production – outdoor or protected.



Note: You may undertake one 'labour only' contract (such as shearing, fencing or truck driving) or work for a contractor or contracting business.

Securing Practical Work

You are responsible for finding your own positions but the Practical Work Co-ordinator has some industry contacts who advertise vacancies on the LEARN site each year. You are strongly advised to seek out a diverse range of Practical Work opportunities to increase your knowledge of the industry.

Your Practical Work position must comply with the regulations in this handbook and the University Calendar.

If you have found a position but aren't sure if it is suitable, check with the Practical Work Co-ordinator before accepting it.



Note: If there is some reason why you are unable to carry out your Practical Work, please see the Practical Work Co-ordinator as early as possible in your course of study.

Where to Find Practical Work

To find out about available Practical Work positions, see the Practical Work page on your LEARN site or visit the Practical Work Office.

Positions will be advertised as they arrive, usually from June onwards.

You can also find your own work using other contacts if you wish. If you are not sure about some aspects of the work offered, discuss it with the Practical Work Co-ordinator.



Note: All employment contract negotiations must take place between you and the prospective employer.

Applying for Practical Work

It's best to apply for more than one position. Before phoning a contact for Practical Work, be prepared to answer questions about your work experience, when you can start and finish, and the rate of pay. The employer may ask for a Cover Letter and Curriculum Vitae.

Assistance with job applications

If you need extra help preparing your CV or cover letters, please contact Michelle Ash through CareerHub, as her team are very helpful with this.

Your Work Experience

Be very honest about the amount of experience you have had to avoid problems later on. Take the initiative and ask questions if directions are unclear. Ask your employer for a weekly meeting so you can check your progress and make sure you are meeting each other's expectations.

If you have any special requirements, such as health or dietary needs or time off, make sure the employer is aware of these before you arrive.

Before starting work, ask your employer what you need to bring. They may recommend gumboots, wet weather gear, and warm and cool clothing. You should also bring:

- A copy of the report writing guidelines from this handbook (give these to the employer when you arrive so they know the kind of information they will need to provide you with)
- An employer record form, to be signed before you leave
- Your Practical Work diary, to keep a record of the tasks you carry out.

Failure to Secure Practical Work

If you don't succeed in securing Practical Work, see the Practical Work Co-ordinator well before the end of semester.

Keep copies of application letters and replies you have received, as well as a record of telephone calls you made when seeking work (including the person contacted) and the responses.

Recognition of prior Practical Work

You can apply to have appropriate previous work credited to your Practical Work requirements at Lincoln University. This only applies to work that you have completed since finishing high school. Contact the Practical Work Co-ordinator for details.

Overseas Practical Experience

If you would like to undertake some of your Practical Work experience in a country other than New Zealand, please discuss this with the Practical Work Co-ordinator. Normally, no more than half of the required work may be completed overseas.

Carrying Out Practical Work

Roles and Responsibilities

Before starting each Practical Work position, you should meet with the employer to make sure that you both have a clear understanding of the requirements of your role.

It is useful to give an employer a copy of the specific report requirements so you can initiate a conversation about the workplace and give them an understanding of the type of information they will need to supply you with.

You should be asked to sign an employment contract. A contract is a legal document and you must understand all the terms and conditions, so please read it carefully before signing it. Ask the employer to email you a copy so your parents or other interested parties can see it.

Make sure you take part in a Health and Safety Induction with your employer before you commence work.

Professional conduct is expected from both employers and employees.

Please be aware at all times of privacy, confidentiality and professional ethics in relation to your employers and co-workers.



Keeping yourself safe

You must be provided with a safe environment at all times when carrying out your Practical Work activities. Please be sure to:

- Comply with all safety instructions issued by your supervisor
- Remove yourself from any dangerous practices, situations, environments or behaviours immediately
- Report any unsafe conditions to your supervisor as soon as possible
- Ensure that you are familiar with emergency procedures at the workplace
- Ask about the locations of first aid kits and emergency equipment

If you are unsure about anything that is affecting your safety and well-being please have a confidential discussion with the Practical Work Coordinator.

Recording Practical Work

You must submit Practical Work Record Sheets (see Appendix) that have been verified by your employer. You will need a separate sheet for each period of work.

Please make sure the record sheets are signed by both parties.

It is your responsibility to ensure that you present your Practical Work Record Sheets to the employer for completion and then hand them in to the Practical Work Co-ordinator or email them to practicalwork@lincoln.ac.nz.

Check your Practical Work file with the office at least once each year, particularly during the last semester before final examinations, to make sure you have completed the necessary tasks.

Report Guidelines

The report is structured to ensure that you can:

- Describe and analyse the structure and processes of the farm or business, and
- Present a report in a format suitable for consideration by clients.

Presentation

The report must have a cover page that includes the diploma or degree and report type (e.g. Sheep and Beef Practical Work Report, your name, ID number, postal and email addresses). You can include photos if you wish, but check with the owner beforehand.

Assessment

Email your completed report and employer record to practicalwork@lincoln.ac.nz by 25 July. Once you have done this, please submit it to Turnitin on the LEARN Practical Work page.

Unsatisfactory reports will need to be corrected and presented for reassessment.

Return of Reports

You will be notified of your grade, with comments, by email.

Graduating students

If you have any outstanding reports, the final submission date for these is the 20 February in the year that you intend to graduate. However, if you would like an opportunity to resubmit a failed report, it must be received by 1 February of your intended graduation year.



Note: If you submit your Practical Work documentation after 20 February in the year in which you are to graduate, you will not be able to attend the ceremony that year.

Problems on the Job

If you encounter any problems during your employment which make it difficult to remain in your position, please let the Practical Work Co-ordinator know as soon as possible.

Diploma in Agriculture

Property Report Format

In this report, you need to describe the industry's resources and systems.

The title must include property's (or owner's) name, along with your name and the date.

Where appropriate, you can present the information in a bullet-point format.

Include a farm map in the appendix of the report.

Section 1: Property Report

This section describes the inventory of resources.

1.1 Introduction

Describe the property's important features, current land use and any potential for improvement or change.

1.2 Area

Include:

- The total area (in hectares to 4 decimal places)
- An estimate of the effective area.

1.3 Title information

- Ownership information (i.e. the legal owner)
- A certificate of the title reference number
- A legal description
- Title areas
- The tenure (include a lease type if applicable)
- Interests (such as easements, covenants, licences, etc).



Note: If there is more than one title, you may present this information in a schedule.

1.4 Council Information

Include:

- The names of the district and regional councils
- Zoning information
- Information on consents and regulations (i.e. consents for land use, water rights, discharges etc, and notifications for noxious weed control)
- The rating valuation, including the date issued (if appropriate, provide an estimate of current market value at the date of inspection and include the source of this estimate).

1.5 Business Ownership

Describe:

- The ownership structure (for example, a partnership, trust, or share farm) in relation to the legal owner
- Ownership of the stock and plant
- Details of the term, rent, rent review periods, right of renewal, and any other clauses or conditions of any lease.

1.6 Location

Describe:

- The road name and general location in relation to nearest business centre
- The distance from the farm to amenities, including schools, meat processing facilities, sale yards, dairy factories, fertiliser and lime suppliers, transport, port/airport etc, as well as availability of school buses.

1.7 Environmental Compliance

Include:

- Consultancy company used
- Current N leaching figure
- 2013/2014 baseline (if applicable)
- 2018/2019 baseline
- N leaching target
- District / Group
- Major environmental impact
- Main mitigation strategies
- Other comments.

1.8 Climate

Describe the significant climatic features and their impact on land use and productivity, including:

- Rainfall (mm) – the average for the area and range, distribution, seasonal pattern and effect, reliability, droughts and floods
- Wind – prevailing wind, threats and issues
- Temperature – range, periods of restricted growth, frosts, hail, snow etc.



Note: Use tables or graphs to present data if appropriate.

1.9 Topography

Describe:

- Information about altitude – metres above sea level, or the range and general altitude distribution
- Information about the contour/slope, detailing areas of flats, undulating, easy/medium/steep hills etc
- Comments on any limitations relating to cultivation and access
- Aspect – slope/s and directions faced (sunny/shady), exposed or sheltered
- An overall comment on the effects of topography on land use and productivity.

1.10 Soils

Include:

- A table that shows the area of each soil type on the property and describe their main features, including structure, drainage properties, evapotranspiration rates and water holding capacity; where appropriate, you may indicate current productivity levels of each (e.g. SU/ha) and comment on overall suitability to current or any future potential land use
- The current fertility status and recommended maintenance rates for fertiliser and lime
- The current and historical annual applications of fertiliser and lime.

1.11 Weeds, Pests and Diseases

Describe:

- The economically significant problems such as gorse, nassella tussock, grass grub, aphids, and Salmonella Brandenburg
- The method and cost of control
- The effect on present and future productivity
- The possibility of spreading.

1.12 Land Use and Cover

Include:

- A table detailing the area of each type of pasture and/or crop (at a specified date), with main types listed first

- A description of the main features of this cover, including species, age (if relevant) and condition, as well as areas of forestry, bush, scrub/weeds and unutilised land.

1.13 Buildings

Include:

- A list of the main buildings
- Information on the homestead and any stockyards/handling facilities
- A description of the construction materials and age
- Comments on the building condition and adequacy.

1.14 Communication and Power

Describe:

- Telephone and broadband availability
- Details about the electricity supply and reticulation
- The suitability of the communication and power for potential land uses.

1.15 Water Supply

Describe:

- The type of water supply for stock, domestic use and irrigation
- The source, quantity, quality, permanence and adequacy for present and future land use
- A list of water supply or irrigation company shares held in relation to this property.

1.16 Irrigation

Describe:

- The type of irrigation used
- The condition of the equipment
- The mainline reticulation and area covered
- The effectiveness and potential of the irrigation.

1.17 Drainage

Describe:

- The drainage type
- The layout
- The area covered
- How adequate the drainage is.

1.18 Subdivision and Access

Describe:

- The number of paddocks, type and condition of fences, and adequacy of subdivision
- Ease of access for vehicles and livestock, plus the type and condition of tracks
- The shape of the property and its impact on access and subdivision.

1.19 Shelter

Describe:

- The type of planted shelter, species and maintenance requirements
- The effectiveness and adequacy
- Any natural shelter available, i.e. from contour, bush, etc.

1.20 Forestry

Describe:

- The farm's plantation forests if applicable, including areas, type, age and silviculture.
- Prospects for harvesting, i.e. timing, method and access for machinery.
- Implications for the Emissions Trading Scheme.

1.21 Amenity Plantings

Include:

- Details about the use and areas of riparian strips on waterways
- QE11 Trust covenants
- Other environmentally protected areas – include their legal status if it differs from that of the rest of the property.

Section 2: The Farm System

This section details the actual farm system and its components.

2.1 Introduction

Briefly describe the farm system currently operated.

2.2 Stock

Include:

- A table that show stock numbers by type and class wintered, with historical data if available, showing stock unit conversion rates and totals, and SU/ha
- Proposed numbers if changing
- A comment on trends, seasonal fluctuations of numbers and stock units
- Information about the breed/s and their suitability, stock condition and liveweights.
- A description of the breeding and replacement policy and stock quality, and include any specific genetic information, e.g. PWs and BWs in dairy cattle
- A schedule of stock production and performance data, including reproductive performance, death rates, fibre, milk solids, and velvet production etc as applicable, and comment on trends
- A comment on performance and marketing issues including reproduction rates, growth rates, sale weights, milk solids per cow, per hectare etc, markets supplied and sale prices
- An outline of the main activities that occur throughout the year, for each livestock class, highlighting the timing of critical events and any limitations.



Note: Activities may be shown in tabular form as a calendar of events.

2.3 Cropping Programme

Include:

- A table of areas for each crop, including forage crops
- A schedule of yield and performance data, including historical information
- A description of the crop rotation/s, showing sowing and harvest dates
- Details of any specific fertiliser used
- A comment on the intensity of the cropping programme and/or its complementarities with livestock
- A discussion on the actual performance compared with industry standards and an outline of any potential.

2.4 Pastures

Include:

- A description of the re-grassing programme, including method, seed mixes and fertiliser policy
- Information about annual grazing management, including rotation lengths and conservation for harvesting supplementary feed.

2.5 Feed Supply and Demand

Discuss the balance of feed supply and demand throughout the year and explain how the farm manages critical periods.

2.6 Labour

Describe the actual labour employed, both permanent and seasonal.

2.7 Plant and Machinery

Include:

- A schedule of the plant and machinery, including make, age, size, capacity etc
- A discussion on the adequacy of the main items.

2.8 Farm Maintenance

In relation to soils, pastures, structural improvements and plant, comment on the effectiveness and adequacy of the maintenance and any necessary replacement programmes. Are there any contingent liabilities in this regard?

2.9 Production and Performance

Comment on the overall level of production from the system, discuss how it compares with the district averages, and remark on whether this is sustainable.

Farm Map

The map is an important part of the Farm Management Report, as it allows the reader to visualise the property.

You can use it as a reference for many of the resources that you describe in the Property Report.

Please identify all the main features in your map.

Map Presentation

You can draw a farm map yourself or produce it using internet-based technology from a source such as Google Earth.

Prints of aerial photographs may be acceptable if you add basic information.

However, you might need to include more definitive descriptions of these attributes in the Property Report.

Your map must include:

- Property boundaries and significant physical features
- Formed road access and location in relation to the district and nearest business centre
- A legend.

Appendices

Include any supporting information for your report as a section of the appendices.

Allied Industry Report Format

In this report, you need to describe the industry's resources and systems.

The title must include property's (or owner's) name, along with your name and the date.

Where appropriate, you can present the information in a bullet-point format.

Section 1: General Description

Include:

- The name, address and location of the business you worked in
- An outline of the ownership structure of the business
- A description of the general features and amenities of the business locality.

Tenure

Describe:

- The leasing arrangements of the business, if not owner occupied (i.e. type of lease, rights of renewal, a brief summary of the main terms of the lease).

Business Site

Illustrate:

- The building site (approximate to scale) and describe the functions.

Type of Business

Include:

- A description of the services provided by the business
- A diagram showing the number of employees and positions, categorised into permanent, casual (seasonal) or part-time (for example, regular but works only mornings or two days a week)
- A description of the personnel policy of the business
- A discussion on recruitment of new employees
- An outline of any training programmes provided for new employees
- A list of the additional business assets, such as plant and machinery, land etc. Please include the constructions, age and condition and detail the function of each component.

Employment

Include:

- A detailed outline of the work you undertook, describing how this work fitted in with the business as a whole, where most of the work was undertaken and for how long you were employed
- The role the business plays in the agricultural industry.

Section 2: Case Study

Your case study is to be written in paragraph format.

Select one important feature of the management of the business and write a comprehensive account of it.

Appendices

Include any supporting information for your report as a section of the appendices.

Farm-Support Rural Contractors Report Format

After completing rural contractor Practical Work, you must write a three-part report. Include titled diagrams, graphs and illustrations as appropriate.

The report must have a title page, showing the business's (or owner's) name, the student's name and the date.

Section 1: General Description

The General Description section should include:

- The name and location of the business you worked in.
- A description of the type of business and nature of the work conducted.
- An outline of the ownership structure of the business (diagram where appropriate).
- The objectives of the business (mission statement, goals and objectives).
- A description and illustration of the chain of command of the business (i.e. the management structure).
- Describe the type of farms you typically worked on and the climatic conditions influencing them (such as rainfall, altitude, aspect, soils etc.). Discuss if these factors had any impact on the contracting business e.g. timing of work, speed of work etc.

Production and Marketing Activities Describe:

- The role the business plays in the agricultural industry.
- The activities, products and services provided by the business, and their contribution to the business portfolio.
- How the business meets the market's needs.

- The assets of the business (if machinery based), list and describe and comment on condition, adequacy, maintenance and replacement policies.
- The seasonality of the business (if seasonal) how does this affect the business and how is it managed.

Labour Include:

- A description of the personnel policy of the business.
- A diagram showing the number of employees and positions, categorised into permanent, casual (seasonal) or part-time (regular but work only mornings or two days a week, etc).
- A discussion on recruitment of new employees.
- An outline of any training programmes provided for new employees.

Section 2: Management Analysis

In this section, you should summarise the business objectives and goals and describe how well they are being met. Undertake a SWOT analysis focused on the management and performance of the business to identify any issues or opportunities that could lead to an option or options for improvement in the current system.

You do not need to cover all areas described in the previous sections, but use these to guide your thinking.

For example, with reference to Section 1 and business ownership, comment on how this influences management of the business. Comment on the appropriateness of this ownership structure, and any change that could improve this factor.

Other areas you could consider include the following:

- Activities & offerings, advertising, networking and purchasing: the appropriateness of the business's range of services, the success of any advertising strategy, processes for determining prices, supply contracts situation, purchasing policy for inputs, how they network and collaborate with other industry players such as transport companies or consultants, ways of completing work that could be considered novel.
- A financial commentary covering the sources of income and their relative contributions, and the value of the businesses assets – if this information is available.
- Staffing: the influence of employee training programmes on managerial efficiency, innovative techniques to incentivise staff to perform to a higher level.
- Potential major risks to the business operation, identifying how these could be managed.
- Areas you believe could be improved on, such as systems or staffing practices.



Note: Any criticisms should be kept professional and not denigrating to individuals or the business.

Section 3: Evidence Portfolio and Reflective Log

In the first part of this section you should illustrate the nature of the work you have undertaken through the following:

- A brief description of the major activities or tasks that you have performed during your time at work.
- Choose two significant activities or tasks that you have carried out, describe each activity or task and your contribution, provide relevant dates, e.g. daily, every other week, or a one off activity or task.

- Provide evidence of the personal attributes and employability skills acquired/developed during your employment referring to your two chosen activities or tasks previously described.

The personal attributes and employability skills fit within six core competencies defined below:

- Communication – written, verbal, group discussion, oral presentation, ability to read, synthesise and, if necessary, disseminate information.
- Working with others – team working, planning a complex task with others, reviewing work with others, establishing and maintaining effective working relationships.
- Using and applying numbers – ability to collect and interpret data, perform calculations, interpret results and justify methods.
- Problem solving – explore a complex problem and produce options for solving it, plan and implement at least one option for solving the problem, review progress and revise approach, solve the problem.
- Using IT – plan and use different resources, explore, develop and exchange information, present the task using IT methods.
- Improving own learning and performance and professionalism – demonstrate time management, agree task targets and plan meeting targets, meet targets by planning and seeking feedback and support, review progress; work independently, demonstrate motivation, demonstrate reliability, demonstrate accuracy, demonstrate flexibility, show integrity, demonstrate self-development.

In the second part of this section, you should reflect upon your workplace experience by answering the following questions:

- What did you learn from your employment and how useful was the employment to your future career plans?
- What was your personal contribution to the business?
- How have the different activities and tasks undertaken contributed to your knowledge, skills, attitudes, and personal attributes? In relation to these what attributes and skills have you gained or developed and of these which do you perform well? What do you need to do to develop these further and develop new skills?
- What advice or suggestions would you give to this business? This may be something to change in terms of day to day operations, or a longer term strategic change.

Appendices

Include any supporting information for your report as a section of the appendices.

Lincoln University

Practical Work Record Sheet



Complete a separate sheet for each period of work

Student Details

Student ID	
Student Name	
Email	
Telephone	
Home Address	

Employer Details

Name of Business/ Enterprise	
Owners' Full Name	
Telephone	
Employer Address	

Practical Work Details

Work category (tick)	☐	Sheep	☐	Sheep/beef	☐	Dairy	☐	Crop	☐	Finishing
	☐	Beef	☐	Dairy Support	☐	Equine	☐	Deer	☐	Contracting
	☐ Allied industry (Specify)									
Farm size (ha)										
	Stock numbers			Cash crops			Area ha			
Sheep				Small seeds						
Dairy cows				Greenfeed						
Beef cows				Peas						
Deer				Wheat						
Dairy support				Barley						
Equine				Other						

Employment Details

Dates	From / /	To / /
Number of weeks worked		
Employer name		
Employer signature		Date
Student signature		Date

Lincoln University

Practical Work Record Sheet



Complete a separate sheet for each period of work

Student Details

Student ID	
Student Name	
Email	
Telephone	
Home Address	

Employer Details

Name of Business/ Enterprise	
Owners' Full Name	
Telephone	
Employer Address	

Practical Work Details

Work category (tick)	☐ Sheep	☐ Sheep/beef	☐ Dairy	☐ Crop	☐ Finishing
	☐ Beef	☐ Dairy Support	☐ Equine	☐ Deer	☐ Contracting
	☐ Allied industry (Specify)				
Farm size (ha)					
	Stock numbers	Cash crops	Area ha		
Sheep		Small seeds			
Dairy cows		Greenfeed			
Beef cows		Peas			
Deer		Wheat			
Dairy support		Barley			
Equine		Other			

Employment Details

Dates	From / /	To / /
Number of weeks worked		
Employer name		
Employer signature		Date
Student signature		Date



LINCOLN
UNIVERSITY

TE WHARE WĀNAKA O AORAKI

Find out more at www.lincoln.ac.nz