



**STORM & FLOOD INDUSTRY  
RECOVERY PROGRAM**

A project of the Primary Industries  
Education Foundation Australia

# Cultivating Classrooms: Maintaining Pollination for Plant Production Using AI Workshop

Presented by:

Ben Holmes - PIEFA SFIRP Project Manager

# ACKNOWLEDGEMENT OF COUNTRY

PIEFA acknowledges Traditional Owners of Country throughout Australia (Brisbane Water - Darkinjung people - "Place for Drinking") and recognises the continuing connection to lands, waters and communities. We pay our respect to Aboriginal and Torres Strait Islander cultures; and to Elders past and present.



# WHO ARE WE?

PIEFA is a not-for-profit foundation formed through a collaboration between the Australian Government, primary industries organisations and the education sector.

Through a range of online and in-person programs, we enhance food and fibre knowledge and understanding to young Australians through the development and promotion of:

- teaching materials about food and fibre for students in K-12
- teacher professional development opportunities
- career pathway information, including scholarships



**BRINGING FOOD AND FIBRE EDUCATION TO THE CLASSROOM!**

[WWW.PRIMEZONE.EDU.AU](http://WWW.PRIMEZONE.EDU.AU)

Primary Industries Education Foundation Australia (PIEFA) is the national leader in food and fibre education. Through classroom resources, eLearning courses, teacher professional development, and agriculture career pathways, PIEFA educates young Australians about where their food and fibre comes from.

**Primezone** is PIEFA's online resource hub, packed with a huge range of free, Australian curriculum-linked, high quality, vetted food and fibre education resources for Foundation through to Year 12.  
[PRIMEZONE.EDU.AU](http://PRIMEZONE.EDU.AU)

**Career Harvest** enables students and job seekers to discover the many rewarding careers and pathways in the agriculture and food & fibre sectors, including scholarships and other opportunities.  
[CAREERHARVEST.COM.AU](http://CAREERHARVEST.COM.AU)

To support Primezone, **Primezone Academy** provides teachers and students with single-point access to a range of curriculum-aligned food and fibre eLearning courses.  
[PRIMEZONEACADEMY.EDU.AU](http://PRIMEZONEACADEMY.EDU.AU)

**Virtual Classroom**

PIEFA's **Virtual Classroom** and **Farmer Time** programs provide real-world context for students in Foundation to Year 12 as they connect with a farmer, fisher or forester and take a virtual tour, interact and ask questions.  
[FARMERTIME.COM.AU](http://FARMERTIME.COM.AU)

**FIND US ON SOCIAL MEDIA**    

[WWW.PIEFA.EDU.AU](http://WWW.PIEFA.EDU.AU)

# PIEFA'S PROGRAMS

Enhancing food and fibre education and career pathways for young Australians.



Curriculum-aligned, Australian farming, fishing & forestry classroom lessons for F - 12.

[primezone.edu.au](http://primezone.edu.au)



An eLearning portal providing access to food and fibre courses for students.

[primezoneacademy.edu.au](http://primezoneacademy.edu.au)



Primary industries careers information, including courses, scholarships & pathways.

[careerharvest.com.au](http://careerharvest.com.au)



K-12 students connect with a farmer, fisher or forester, ask questions and take a virtual tour.

[farmertime.com.au](http://farmertime.com.au)



Online teacher forums, SFIRP PD opportunities, and newsletter sign-up.

[piefa.edu.au](http://piefa.edu.au)



# PIEFA'S PROGRAMS

Enhancing food and fibre education and career pathways for young Australians.



Gap year program that provides a paid job, training and development for people aged 17-25.

[agcareerstart.com.au](http://agcareerstart.com.au)



Resource package that addresses safety issues on farms.

[piefa.edu.au/future-farm-safety-for-life](http://piefa.edu.au/future-farm-safety-for-life)



Creating resilience through empowering school curriculums about primary industries careers.

[piefa.edu.au/sfirp](http://piefa.edu.au/sfirp)



Online and in-person Teacher PD opportunities throughout the year.

[primezone.edu.au/stem-teacher-pd](http://primezone.edu.au/stem-teacher-pd)



Teacher PD run in collaboration with NSW DPI and RASNSW.

[knowingandgrowing.edu.au](http://knowingandgrowing.edu.au)



# PIEFA's Teaching Resources

The screenshot shows the Primezone website interface. At the top, there is a navigation bar with links for Search, PIEFA Programs & Projects, Academy, FarmerTime, Careers, News, and Contact Us. The main header features a large image of fresh produce (peppers, eggplant, tomatoes, and lettuce) with the text "Primary Industries Lesson Plans and Educational Resources" and a search button. Below this is a row of five blue buttons: "Years F-12 Lesson Plans", "SFIRP Program", "AgCareerStart Find Out More...", "Farmer Time Live Streaming", and "Primezone Academy Online Courses". The main content area is titled "Our Latest Lesson Plans & Teaching Resources" and displays a grid of resource cards. These include: "GRDC Grains Careers | PIEFA Food and Fibre Card Game" (Years 7-10), "Winter Wheat and Summer Sunflowers" (4 lessons, Foundation to Year 2), "Junior Landcare Bee Resources", "Virtual Egg Industry Careers Tour", "Dairy Jobs That Matter", "A Day in the Life of a Wine Grape Virtual Tour | Wine Australia", "From Paddock to Plate | Australian Good Meat Education", "Agriculture Celebrity Heads Game", "Cultivating the Next Generation Project | AgriFutures", "SFIRP | Career Q&A Sessions - Vertical Farming Learning Kit", "Analyse a Research Study | NSW DPI", and "Plant trials and Experimental Design | NSW DPI".

This block displays three overlapping educational resources. The top-most image is the cover page for the "GRDC Grains Careers | PIEFA Food and Fibre Card Game" for Years 7 to 10. The middle image shows a grid of cards from the game, including sections for "INSTRUCTIONS", "GRDC Careers", and "Create a Question". The bottom-most image is a detailed view of the "Create a Question" form, which includes a "Create a Question" section with instructions to choose a career card and a "Question 1" section with a "Question 2" section.

# SFIRP program



ABOUT - TEACHING RESOURCES - BECOME A MEMBER - FOOD & FIBRE CAREERS - NAAE - NEWS - CONTACT

**YEAR 9-10**  
SUSTAINABILITY IN AUSTRALIAN AGRICULTURE  
VIEW COURSE

**YEAR 7-10**  
EXPLORING DRONES & AI IN AGRICULTURE  
VIEW COURSE

**YEAR 10**  
CAREERS IN AGRICULTURE  
VIEW COURSE

## STORM AND FLOOD INDUSTRY RECOVERY PROGRAM

Creating resilience through empowering school curriculums about primary industries careers.



PIEFA's Storm and Flood Industry Recovery Program (SFIRP) is jointly funded by the Australian and NSW Governments under the Disaster Recovery Funding Arrangements through the Department of Regional NSW – Sector Recovery and Resilience Grants.

The project will improve community connectivity, linking schools with local primary industries and the many rewarding agricultural careers that are available in flood affected LGAs across NSW. By developing locally focussed teaching resources and careers programs, this project will deliver a stronger foundation to develop interest in local careers in the primary industries, building local resilience to improve recovery from flood disasters.

Contact  
Ben Holmes, PIEFA SFIRP Project Manager  
Email: Ben.holmes@piefa.edu.au Phone: 0480 458 220

## Explore Storm & Flood Recovery Program Events & Resources

PLAN YOUR 2024 TEACHER/CAREER ADVISOR PD TODAY

PAST EVENT RESOURCES

INDUSTRY PARTNER CAREER RESOURCES

UPCOMING TEACHER PROFESSIONAL DEVELOPMENT

TEACHING RESOURCES

CAREERS IN AGRICULTURE DIGITAL LEARNING KITS

PRIMEZONE RESOURCES

SFIRP PRIMEZONE ACADEMY COURSES

## PLAN YOUR 2024 TEACHER/CAREER ADVISOR PD TODAY!

Explore upcoming NSW secondary school teacher and career advisor events

Join PIEFA's Storm and Flood Industry Recovery Program for face to face workshops, online events, new food and fibre resources and more!

Across our events, you will take part in demonstrations and hear presentations from expert speakers. You will workshop new resources, develop your understanding of career opportunities available in the agriculture industry at entry, trade and graduate level and identify skills and training pathways for students.

[DOWNLOAD THE 2024 CALENDAR OF EVENTS HERE](#)

### CALENDAR 2024

JANUARY	FEBRUARY	MARCH
M T W T F S S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	M T W T F S S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	M T W T F S S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
APRIL	MAY	JUNE
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OCTOBER	NOVEMBER	DECEMBER
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### STEP INTO AGRICULTURE

**S** SOLUTIONS  
**H** HANDS ON  
**O** OPPORTUNITIES  
**J** ENTREPRENEUR  
**S** SKILLS

WHAT SHOES WILL YOU WEAR?

Maintaining pollination for plant production using Artificial Intelligence.  
TEACHER GUIDE  
YEAR 7-10

Producing Pollinators for Improved Orchard Yields  
TEACHER GUIDE  
YEAR 7-10

Farmer Time | Experts In The Field, Episode 1: Drones On Farms

Agricultural Technology: Exploring the New Frontier  
TEACHER GUIDE  
YEAR 9-10

Pre-Start Meetings, Job Safety Analysis (JSA) and Safe Work Instructions (SWI) - Tractor and Machinery Operations  
TEACHER GUIDE

Farming a Sustainable Future  
TEACHER GUIDE  
YEAR 7-10

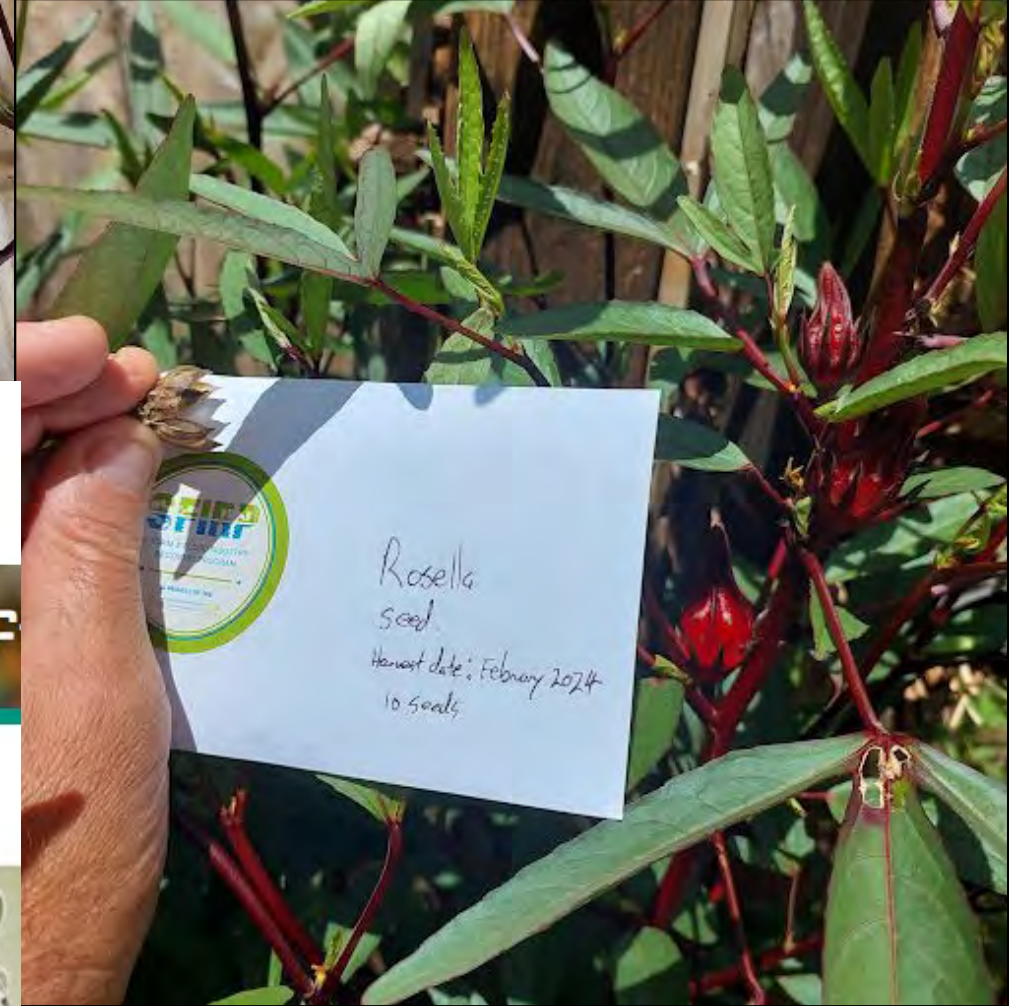
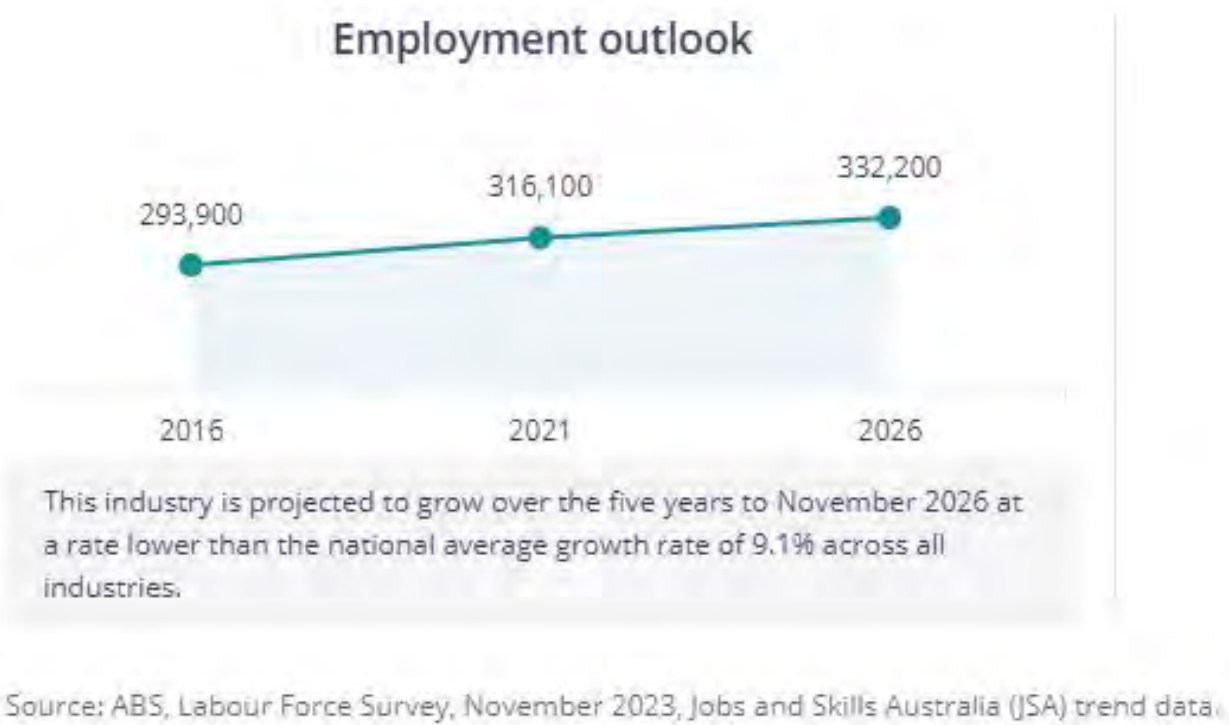
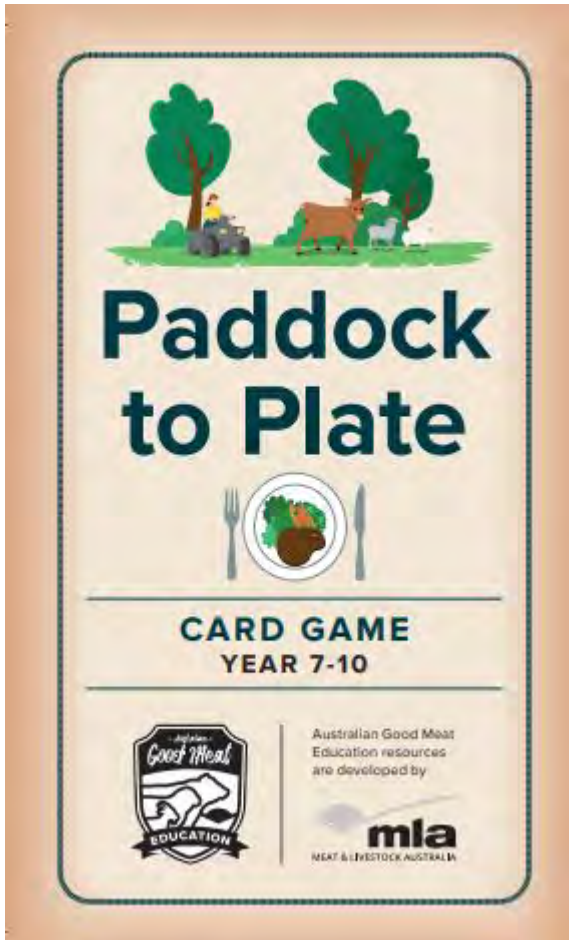
### Select Agriculture...

Subject selection could be...

- Agricultural Technology Years 7-10
- Agriculture Years 11 - 12
- Primary Industries HSC VET Years: 11-12



# WORKSHOP MERCHANDISE: ADDITIONAL GIFTS FROM PIEFA





# WORKSHOP PROGRAM

<b>Part A</b>	New Stage 4 and 5 “Maintaining Pollination for Plant Production Using AI” resource workshop Ben Holmes PIEFA
<b>Morning tea</b>	
<b>Part B</b>	“Maintaining Pollination for Plant Production Using AI” - Ben Holmes Canva video editing.
<b>Part C</b>	“Maintaining Pollination for Plant Production Using AI” - AI and Agtech coding workshop - Fraser Border Integrated STEM
<b>Lunch</b>	
<b>Part D</b>	“Maintaining Pollination for Plant Production Using AI” - Classroom implementation, AGtech, STEM and Careers - Fraser Border Integrated STEM
<b>Afternoon tea</b>	
<b>Part E</b>	PIEFA SFIRP new resources - Including Food and Fibre Supply Chain card games, Celebrity Heads.
<b>Part F</b>	ACER Evaluation survey/finish



# MAINTAINING POLLINATION FOR PLANT PRODUCTION USING AI

Download the resource - <https://www.piefa.edu.au/sfirp>

- Group Challenge: **Learning intention** - develop a creative, technological solution to an agricultural issue.
- Stage 4 & 5 – Technology Mandatory, Agriculture, Science and Geography.
- 6 lessons - Teacher guide and student workbook.
- Exploring sustainability, biodiversity, innovation, technologies and challenges in plant and animal production.



**How can AI be used to provide solutions to agricultural challenges?**

# MAINTAINING POLLINATION FOR PLANT PRODUCTION USING AI

## Supporting resources

- A **new unit of work on native bee production** has been developed in 2023 as a collaboration between the RIEP network, Rural Learning Exchange and Mount View High School. Please **contact Sam Jarrett** for access to these and other resources.
- **Contact: Sam Jarrett**  
**TAS Curriculum Adviser | Curriculum Secondary Learners**  
**0438 414 277 | [samantha.mcauliffe1@det.nsw.edu.au](mailto:samantha.mcauliffe1@det.nsw.edu.au) | [education.nsw.gov.au](http://education.nsw.gov.au)**  
**[TAS Statewide Staffroom](#) | [TAS \(nsw.gov.au\)](http://TAS (nsw.gov.au))**
- [TAS statewide staffroom | General | Microsoft Teams](#) - official TAS Curriculum Teams site with updates, important notices and further PL for TAS teachers in NSW.
- [TAS Curriculum Teaching and Learning Webpage](#) - official TAS team website uses to publish resources for anything TAS 7-12. As new syllabuses are released from NESAs there will continue to be more resources added to this site from the TAS Curriculum Team.
- [Rural Ag Network](#) - Initiative from the Rural Learning exchange, a Teams site dedicated to collaboration and support of NSW Agriculture teachers.



# MAINTAINING POLLINATION FOR PLANT PRODUCTION USING AI

## Current Industry developments:

- Robotic beehives: [Beewise: out-of-the-box thinking to save the world's bees \(wipo.int\)](#)
- [BeeInnovative](#) - Australian Commercial AGTECH - BeeDAR and BeeID programs - blueberry trial increase gain \$20000/acre (\$20/tree), sunflowers trial - increased oil content by 10%
- Further learning: Digital Technologies Hub - AI in secondary education <https://www.esa.edu.au/professional-learning>
- Australian Framework for Generative AI in schools (this activity is not generative AI) <https://www.education.gov.au/schooling/resources/australian-framework-generative-artificial-intelligence-ai-schools>
- ABC Native bee hotel video [Bee Clean - Gardening Australia \(abc.net.au\)](#)
- **Australian native bees:** Data - 4000 tree av orchard, 10-30% gain with effective pollination. 10kg av yield/tree, 1kg extra at \$3/kg = \$12000, cost of pollinating 4000 trees = \$8000, min gain in return of 33%



Growers Beekeepers Impact



A screenshot of the BeeInnovative website. The top navigation bar includes links for Home, BeeDar | Precision Pollination, BeeID | Bio Security, About Us, and Contact. The main heading reads "We safeguard and supercharge the power of pollination" with the subtext "For farmers, food security and our future". Below this, a paragraph describes the company's mission. Two columns are featured: "BeeDar MAXIMISING POLLINATION Precision Pollination" and "BeeID Biosecurity". Each column has a "Learn More" button.



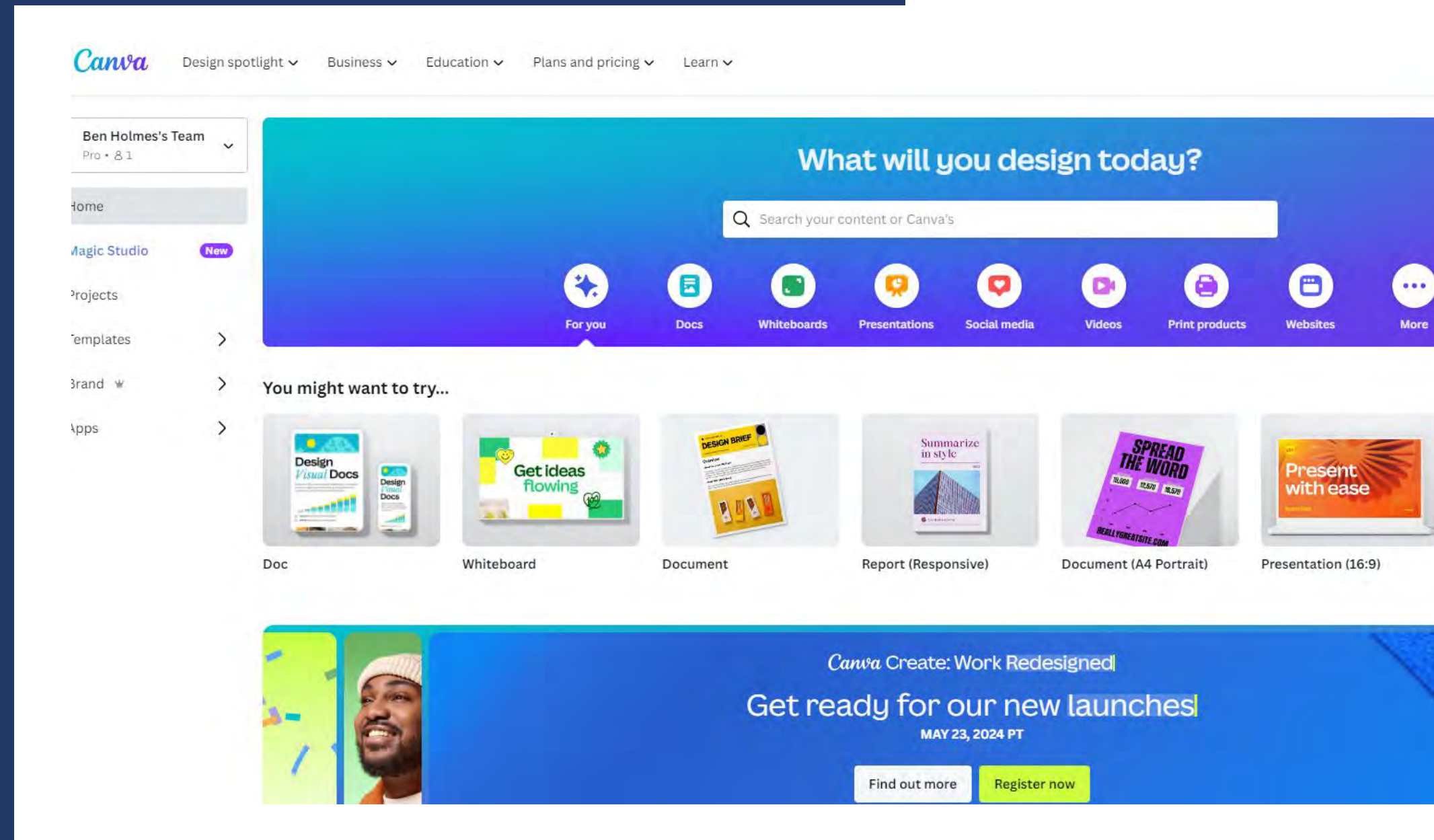
STORM & FLOOD INDUSTRY RECOVERY PROGRAM



PIEFA The leader in food and fibre education.

# MAINTAINING POLLINATION FOR PLANT PRODUCTION USING AI

Canva video editing and document development



# PIEFA New resources

## Supply Chain card games:

PIEFA Food & Fibre  
CARD GAME

### The Mighty Mushie



YEAR 5-10

Primary Industries Education Foundation Australia | primezone

Australian MUSHROOMS | AMGA

Hort Innovation Strategic levy investment | MUSHROOM FUND

PIEFA Food & Fibre  
CARD GAME

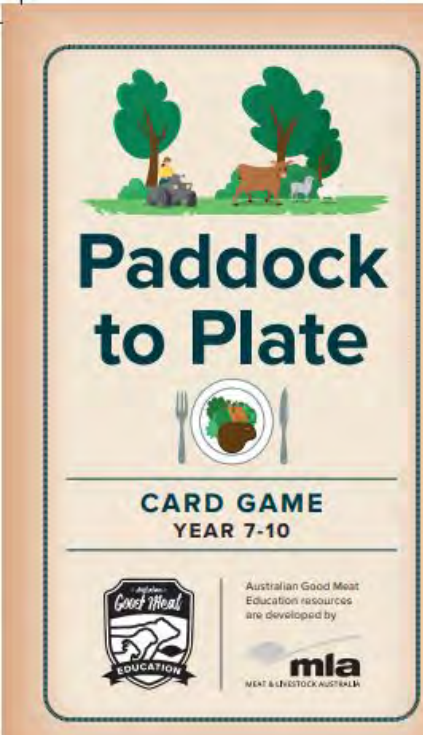
### Australian Apples Supply Chain



YEAR 7-10

Primary Industries Education Foundation Australia | primezone

Hort Innovation



**Paddock to Plate**

CARD GAME  
YEAR 7-10

Australian Good Meat Education resources are developed by  
mlea MEAT & LIVESTOCK AUSTRALIA


Australian Good Meat Education resources are developed by  
mlea MEAT & LIVESTOCK AUSTRALIA

7-8 | LESSON PLAN

Lesson 5

### From paddock to plate

AUSTRALIAN CURRICULUM CONTENT



### Unlocking Orchard Opportunities


TEACHER GUIDE

LESSON 1

YEAR 9-10

This resource has been developed by  
Primary Industries Education Foundation Australia | primezone

Hort Innovation



Hold on MIGHTY MUSHIE

### The Supply and Marketing Chain

TEACHER GUIDE

LESSON 3

YEAR 9-10

This resource has been developed by  
Primary Industries Education Foundation Australia | primezone

AMGA Australian MUSHROOMS | Hort Innovation MUSHROOM FUND

# Primezone Academy courses

Exploring Drones and AI in Agriculture.

Careers in Agriculture

Sustainability in Australian Agriculture

Click on the images for website links



## New

[Understanding the Water Cycle | Impact on Farm Management \(primezoneacademy\)](#)

### Understanding the Water Cycle and its Impact on Farm Management

Understanding the Water Cycle & its Impact on Farm Management uses the central theme of sustainability, students will recap their knowledge of the water cycle & its effect upon soil erosion & identify connections between sustainable farm management

Enroll for free

# Careers in Agriculture Digital Learning Kits



Click on the images for website links

## Careers in Agriculture

### Career Q&A Video Sessions Digital Learning Kits

These Career Q&A Digital Learning Kits have been designed to showcase the diverse career pathways and opportunities within agriculture. Each kit contains 3 videos and an associated resource.

[Explore Digital Learning Kits](#)

### Traditional Farming Digital Learning Kit

This Digital Learning is centred around Traditional Farming, with a focus on the cotton industry.



[Explore the Digital Learning Kit](#)

### Discover Exciting Careers from our Industry Partners

Learn about the range of opportunities available in the Australian Agricultural Industry.



[Explore more videos](#)

1. Traditional Farming
2. Vertical Farming
3. Peri-Urban farming
4. Unusual Farming



# New Resources



**Farmer Time | Experts In The Field**

**The Black Soldier Fly  
A Sustainable Solution**

TEACHER GUIDE

YEAR 7-8

This resource has been developed by:



**Agricultural Celebrity Heads**

**Explaining Reasons for Plant and  
Animal Use in Agricultural Enterprises  
Considering Australian Markets and  
the Environment.**

TEACHER GUIDE

YEAR 7-10

This resource has been developed by:



1



Click on the image for  
website link



# FARMER TIME | EXPERTS IN THE FIELD

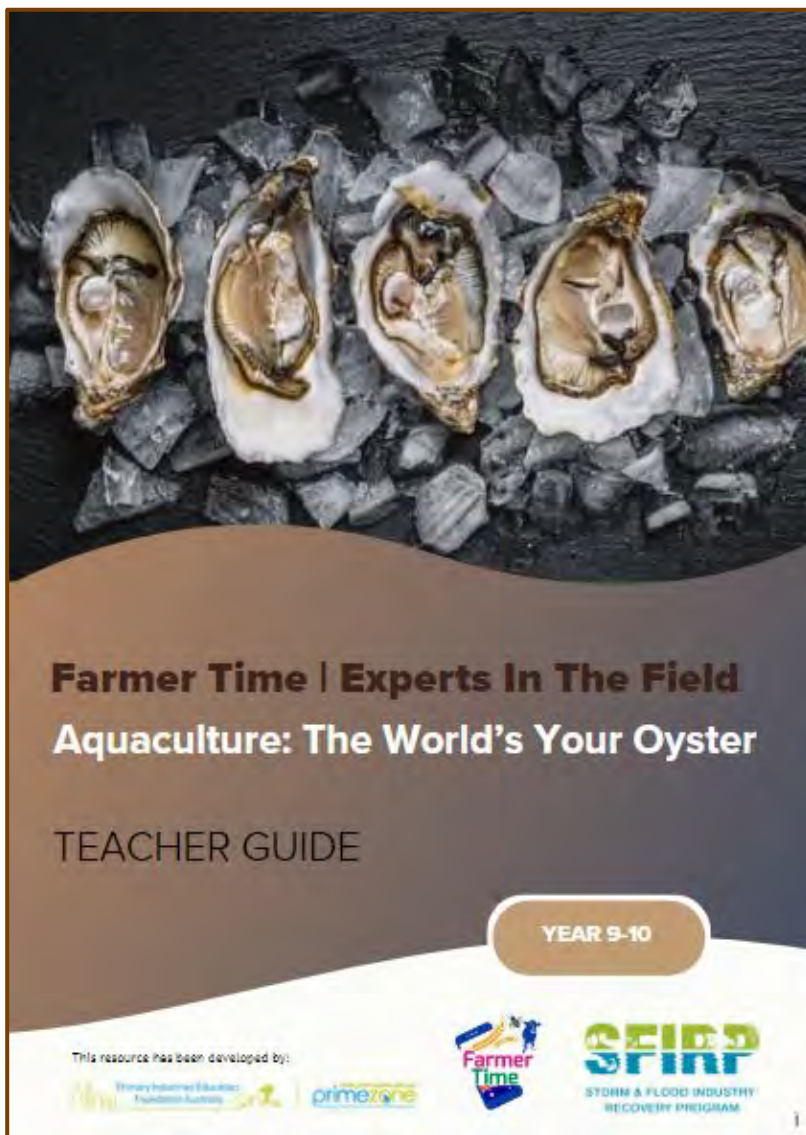
## EXPLORING DRONES IN AGRICULTURE

Click on the images for website links




**Farmer Time | Experts In The Field**  
**The Black Soldier Fly**  
**A Sustainable Solution**  
 TEACHER GUIDE  
 YEAR 7-8

This resource has been developed by: 



**Farmer Time | Experts In The Field**  
**Aquaculture: The World's Your Oyster**  
 TEACHER GUIDE  
 YEAR 9-10

This resource has been developed by: 



**Farmer Time | Experts In The Field**  
**Exploring Drones In Agriculture**  
 TEACHER GUIDE  
 Episode 1: Drones On Farms  
 YEAR 7-10

This resource has been developed by: 

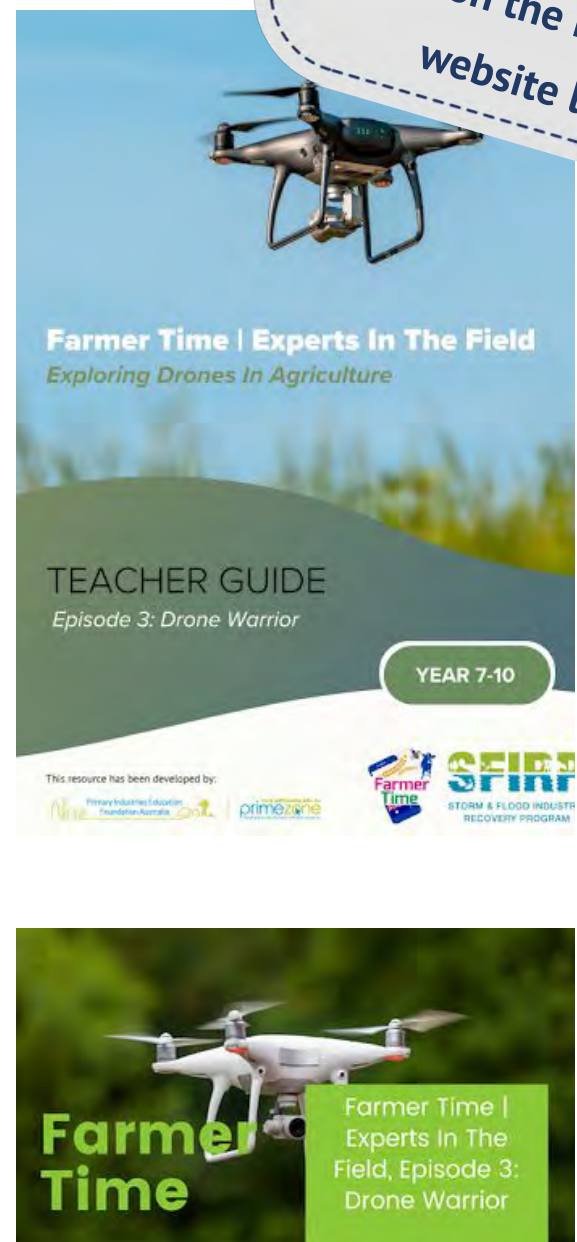
**Farmer Time** | Experts In The Field, Episode 1: Drones On Farms




**Farmer Time | Experts In The Field**  
**Exploring Drones In Agriculture**  
 TEACHER GUIDE  
 Episode 2: AgTech - Drones  
 YEAR 7-10

This resource has been developed by: 

**Farmer Time** | Experts In The Field, Episode 2: AgTech - Drones



**Farmer Time | Experts In The Field**  
**Exploring Drones In Agriculture**  
 TEACHER GUIDE  
 Episode 3: Drone Warrior  
 YEAR 7-10

This resource has been developed by: 

**Farmer Time** | Experts In The Field, Episode 3: Drone Warrior



Farmer Time | Experts In The Field – Exploring Drones In Agriculture

**SUBJECT**  
 Agriculture  
 Digital Technology  
 Science


**AC CODES**  
 AC9-10-14-01, AC9-10-14-02, AC9-10-14-03, AC9-10-14-04, AC9-10-14-05, AC9-10-14-06, AC9-10-14-07, AC9-10-14-08, AC9-10-14-09, AC9-10-14-10, AC9-10-14-11, AC9-10-14-12, AC9-10-14-13, AC9-10-14-14, AC9-10-14-15, AC9-10-14-16, AC9-10-14-17, AC9-10-14-18, AC9-10-14-19, AC9-10-14-20, AC9-10-14-21, AC9-10-14-22, AC9-10-14-23, AC9-10-14-24, AC9-10-14-25, AC9-10-14-26, AC9-10-14-27, AC9-10-14-28, AC9-10-14-29, AC9-10-14-30, AC9-10-14-31, AC9-10-14-32, AC9-10-14-33, AC9-10-14-34, AC9-10-14-35, AC9-10-14-36, AC9-10-14-37, AC9-10-14-38, AC9-10-14-39, AC9-10-14-40, AC9-10-14-41, AC9-10-14-42, AC9-10-14-43, AC9-10-14-44, AC9-10-14-45, AC9-10-14-46, AC9-10-14-47, AC9-10-14-48, AC9-10-14-49, AC9-10-14-50, AC9-10-14-51, AC9-10-14-52, AC9-10-14-53, AC9-10-14-54, AC9-10-14-55, AC9-10-14-56, AC9-10-14-57, AC9-10-14-58, AC9-10-14-59, AC9-10-14-60, AC9-10-14-61, AC9-10-14-62, AC9-10-14-63, AC9-10-14-64, AC9-10-14-65, AC9-10-14-66, AC9-10-14-67, AC9-10-14-68, AC9-10-14-69, AC9-10-14-70, AC9-10-14-71, AC9-10-14-72, AC9-10-14-73, AC9-10-14-74, AC9-10-14-75, AC9-10-14-76, AC9-10-14-77, AC9-10-14-78, AC9-10-14-79, AC9-10-14-80, AC9-10-14-81, AC9-10-14-82, AC9-10-14-83, AC9-10-14-84, AC9-10-14-85, AC9-10-14-86, AC9-10-14-87, AC9-10-14-88, AC9-10-14-89, AC9-10-14-90, AC9-10-14-91, AC9-10-14-92, AC9-10-14-93, AC9-10-14-94, AC9-10-14-95, AC9-10-14-96, AC9-10-14-97, AC9-10-14-98, AC9-10-14-99, AC9-10-14-100

**TYPE**  
 PDF Worksheet

**YEAR**  
 7-10

**STATE**  
 QLD, NSW, VIC, SA, NT, ACT, TAS, WA

Episode 1: Drones On Farms



# NEW VIDEO SERIES

Exploring careers and technologies in agriculture



[www.piefa.edu.au/sfirp](http://www.piefa.edu.au/sfirp)

# Alternate AI Teachable machine PROGRAM: Lobe

## Lobe

lobe [Overview](#) [Examples](#) [Tour](#) [Blog](#) [Help](#) [Download](#)

## Train apps to feel emotions

Lobe helps you train machine learning models with a free, easy to use tool.

[Download](#) [Watch Tour](#)



### Pollination Productivity...

[Label](#)  
[Train](#)  
[Use](#)



91% of your images are predicted correctly, 9% incorrectly.

### Fruit sorter

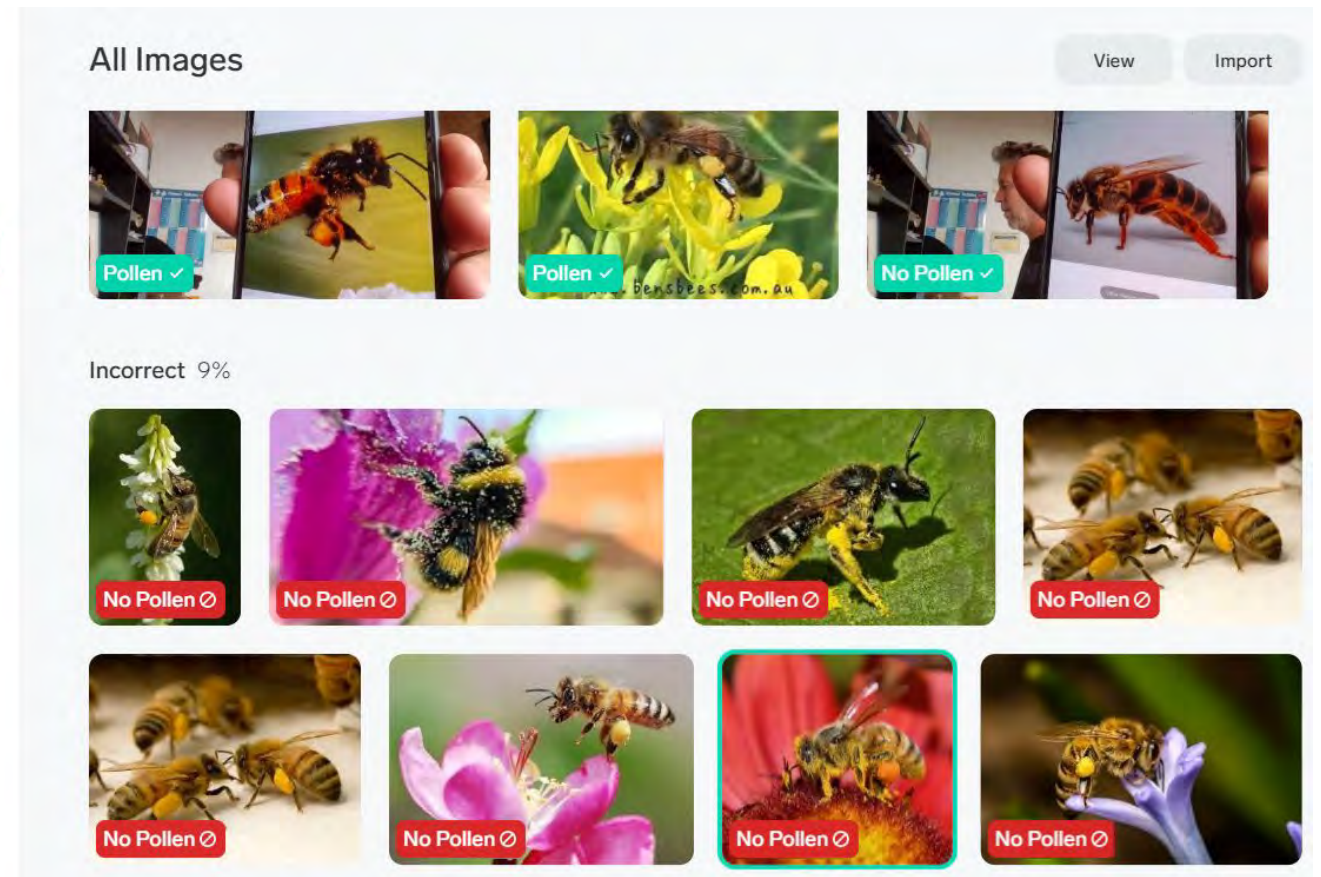
[Label](#)  
[Train](#)  
[Use](#)



99% of your images are predicted correctly, 1% incorrectly.

#### All Images

View Import

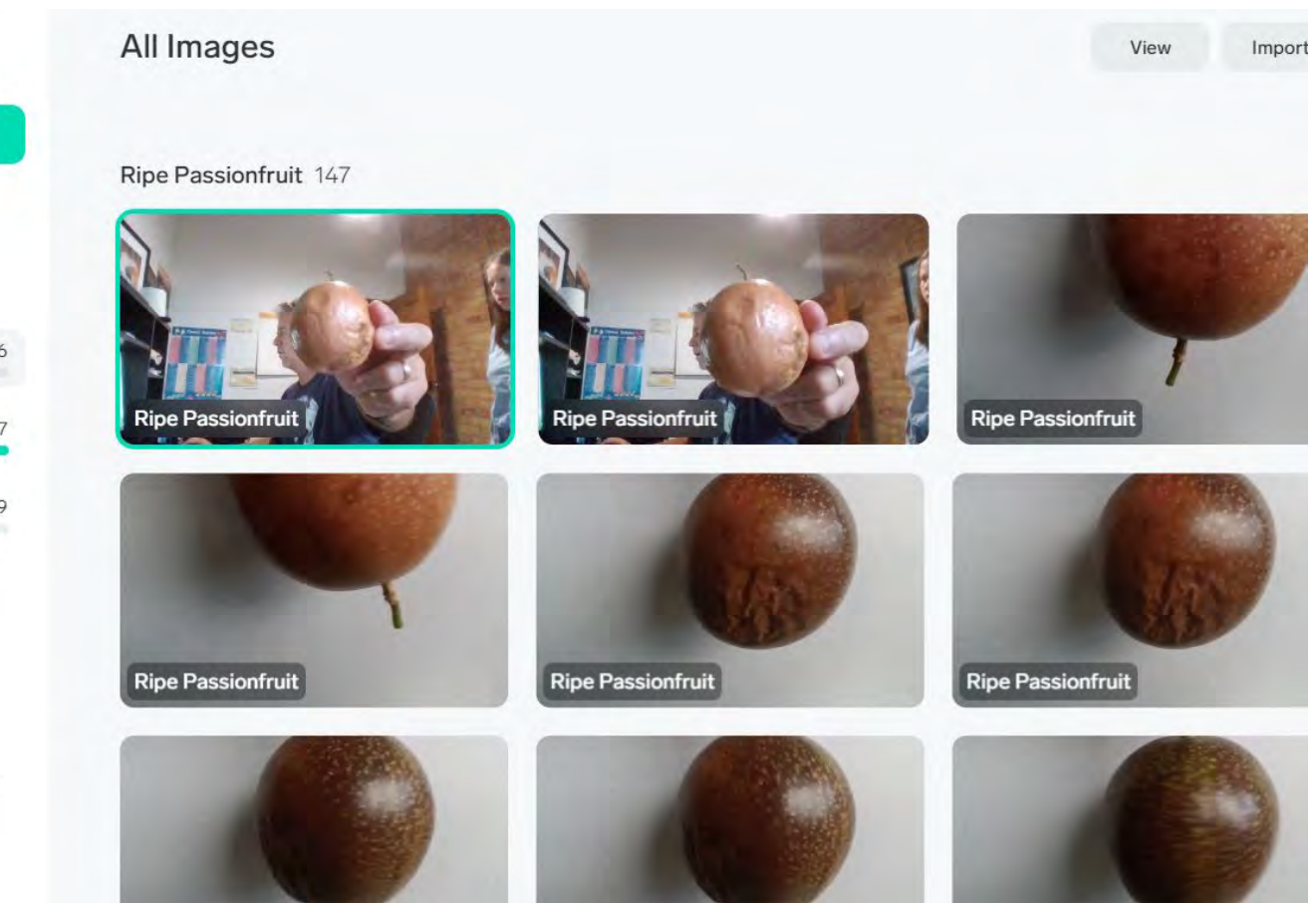


Incorrect 9%

#### All Images

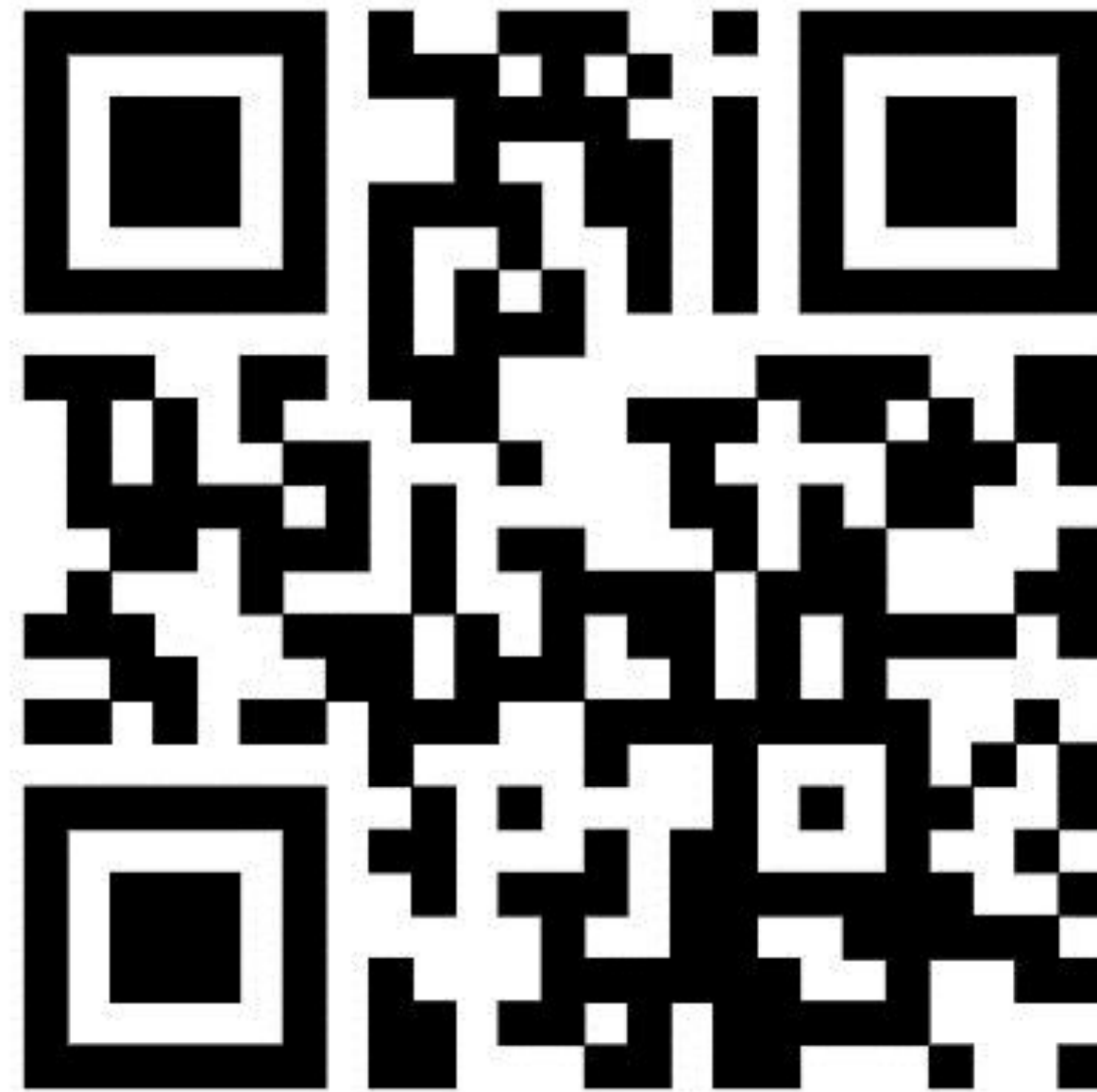
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Ripe Passionfruit 147



# ACER PROGRAM EVALUATION SURVEY

## Survey





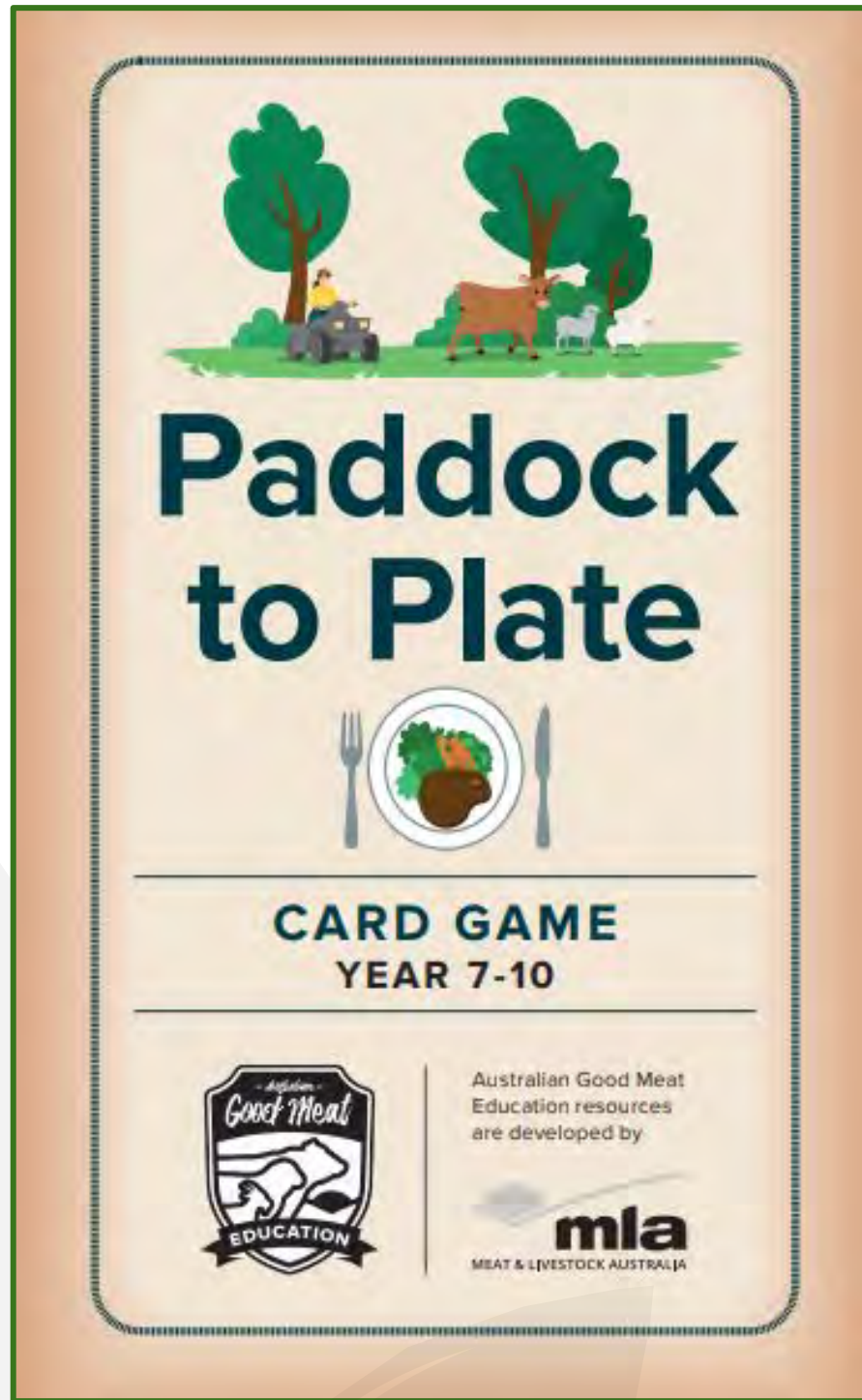
## Teaching Resources



## Australian Good Meat - Teaching Resources

[www.goodmeat.com.au/educational-resources/resources/](http://www.goodmeat.com.au/educational-resources/resources/)

# Game Time!



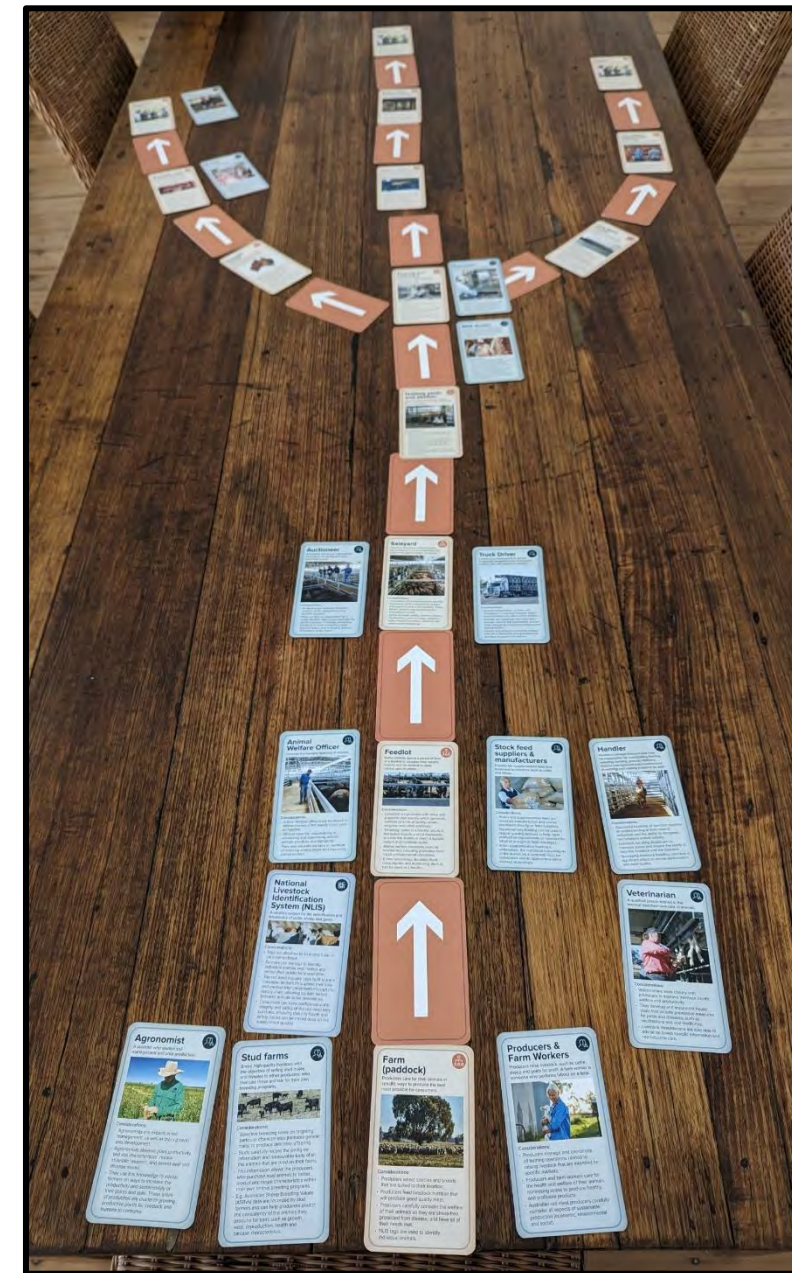
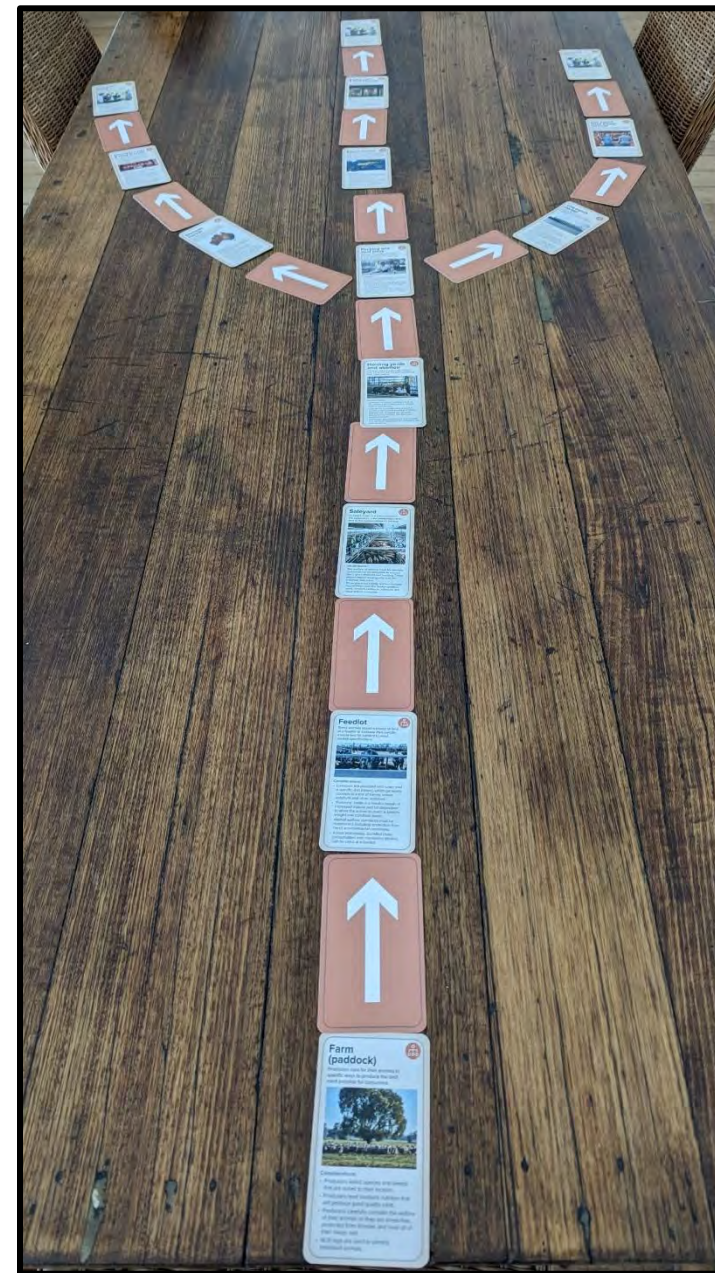
**Paddock to Plate**

**CARD GAME**  
YEAR 7-10

Australian Good Meat Education resources are developed by

**mla**  
MEAT & LIVESTOCK AUSTRALIA

The cover features an illustration of a farm scene with a tractor, a cow, and sheep, and a plate of food with a fork and knife.



**Meat & Livestock Australia**



For instructions and use of these cards in an educational setting, please visit:  
[bit.ly/3CyeJex](https://bit.ly/3CyeJex)

AC9TDE8K01, AC9TDE8K04, AC9TDE8P01, AC9TDE8P02, AC9TDE8P05, AC9TDE10K04.

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# Healthy Living Soils

Australian soil-based, curriculum linked resources for both teachers and students targeting Year 7-10 Science, Geography, and Design & Technologies.

Learn more about our valuable and productive Australian soils featuring hands-on practical tasks, collaborative activities, research opportunities, video content, case studies and suggested answers to support and engage teachers and students.



**TEACHERS**

**STUDENTS**



**Healthy Living Soils – Growing Better Food and Fibre**

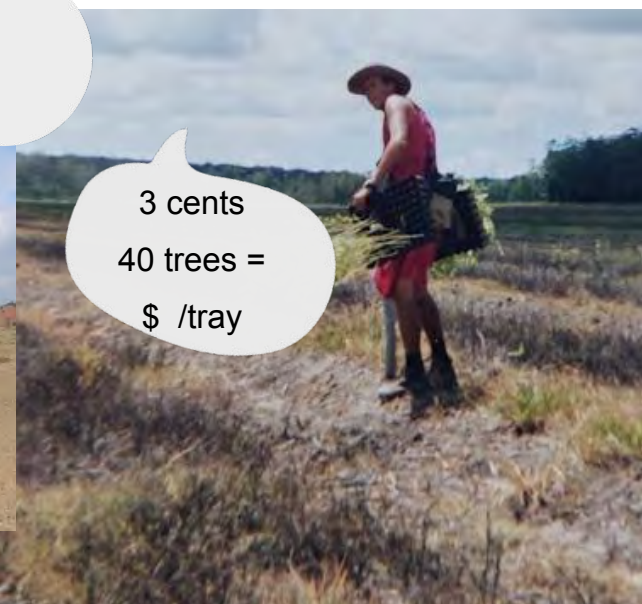




# PRACTICAL IDEAS TO EXPLORE AN AGRICULTURAL CAREER

Touch, feel, think, calculate, question, innovate, suggest solutions.

Why do you think robotic farming and new technologies are attracting so much industry investment and interest?



# EXPLORING A FORESTRY CAREER

Statistics: Need to quadruple production by 2050 to meet demand

## Entry level Example:

Forestry (Silviculture) Tree Planter job specifications:

- 2.1m tree spacing
- Depth
- Orientation
- Firmness
- Environment - standing timber/habitat, riparian, fire trail, trays

## Practical based questions:

- Feel pogo weight, discuss body conditioning to plant 8000 trees/day (gun planter) on cultivated rows carrying up to 160 trees at a time.
- Safety: RSI, Pants - Baggy/long, boots - ankle, Shirts - long, water - regular, hygiene.
- How many steps to plant 100 trees?
- Hyco trays have 40 cells, how many trays do you need to plant to get 6000 trees/day?
- Pogo planting is 3 cents/tree, how much do you get paid for 8000 trees?

## Trade level:

### Machinery Operator

- Pre, op and post op checks, procedures and maintenance
- Environment - weather, substrate, gradient, erosion, heat, fuels, contamination, buffers and exclusion zones
- 2.5m row spacing
- 4m firetrail access

## Graduate level:

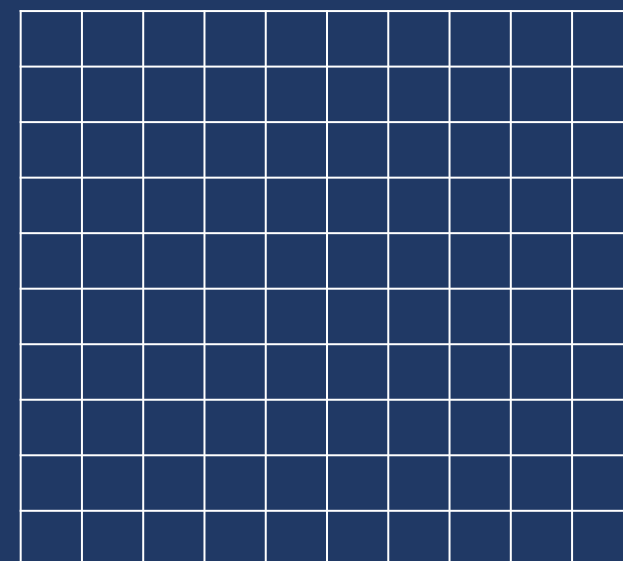
### Forester or QA inspector:

Density: 16 trees per 10m \* 10m cell/quadrat (4 trees for every 10m surveyed row).

Tree quality: >90% Deep, tight and straight

### Forestry plot

1 Ha (100m \* 100m)



# Growing the future...

Thankyou  
for attending today's event

 [piefa.edu.au/sfirp](http://piefa.edu.au/sfirp)



# ATTRIBUTION, CREDIT & SHARING



This resource was produced by Primary Industries Education Foundation Australia (PIEFA). Primary Industries Education Foundation Australia's resources support and facilitate effective teaching and learning about Australia's food and fibre industries. We are grateful for the support of our industry and member organisations for assisting in our research efforts and providing industry-specific information and imagery to benefit the development and accuracy of this educational resource.



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STORM & FLOOD INDUSTRY  
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