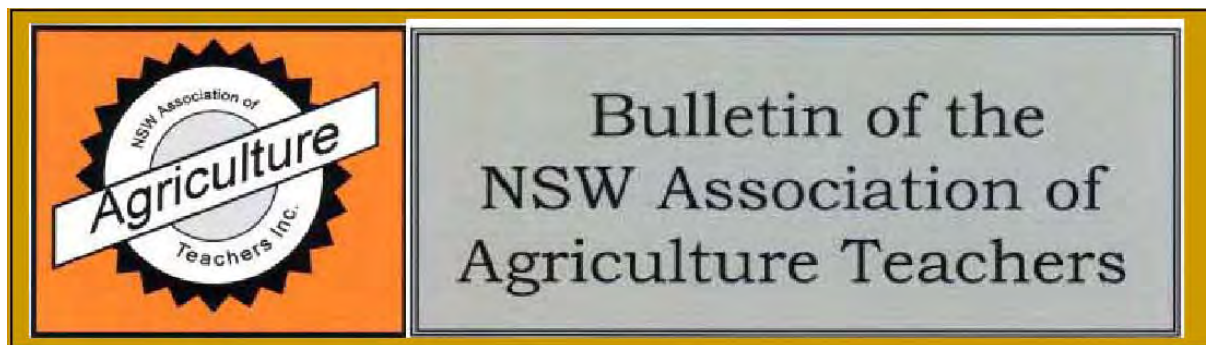




B.A.A.T

**Winter Edition – No: 44
2014**



N.S.W. Association of Agriculture Teachers Inc



www.nswaat.org.au

ABN Number: 81 639 285 642



President:

Carl Chirgwin
Griffith High School
Coolah St,
Griffith NSW 2680
02 6962 1711 (w)
02 6964 1465 (f)
president.nswaat@gmail.com

Secretary:

Jade Smith
Dunedoo Central School,
Digilah St
Dunedoo NSW 2844
02 6375 1489 (w)
jade.smith7@det.nsw.edu.au

Treasurer:

Leanne Sjollem
McCarthy Catholic College
PO Box 3486
West Tamworth NSW 2340
treasurer.nswaat@gmail.com

Technology & Communication:

Ian Baird
Murrumburrah, NSW
webmaster@nswaat.org.au

Nikia Waters
Hillston Central School
nikia.collins1@det.nsw.edu.au

Georgina Price
Coleambally Central School
georgina.bolam1@det.nsw.edu.au

BAAT Editor:

Graham Quintal
Farm Case Studies Project
baat.editor@gmail.com

Email List Manager:

Justin Connors
Manilla Central School
justin.j.connors@det.nsw.edu.au

SAAG Reps:

Graeme Harris (Farrer)
panauara@yahoo.com.au

Rob Henderson (Tomaree High)
robert.i.henderson@det.nsw.edu.au

Phil Armour (Yass High)
philip.armour@det.nsw.edu.au

Archivists:

Tony Butler (Tumut High)
anthony.butler5@det.nsw.edu.au

Phil Hurst (Hawkesbury)
philhurst@bigpond.com

Nigel Cox (Singleton)
nigel.cox@det.nsw.edu.au

www.nswaat.org.au

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President's Report

Agricultural Education continues to strive through tough times. Right across the board of public, independent and religious schools are all seeing cuts to budgets, changes in personnel and curriculum movements. These all will not see us as educators be beaten, as we need to keep inviting students into the farm gate for them to experience Agriculture as we know it.

Now more than ever is when we need our members to get other agriculture educators on board with our association. NSWAAAT is seen as the strongest group of agricultural educators in Australia and we are the envy of other states - but let's not rest on our laurels - we enter a time where we need to keep strong together. So checkout your membership status and keep on-board as this is a tax deductible fee and you will keep our association strong.

Your \$60/year - = 2 BAAT's, on a massive email distribution list, member of NSWAAAT Facebook/Edmodo page, membership of the National Association of Agricultural Educators (NAAE), and gives you the chance to extend yourself with a discount to attend the Biennial NSWAAAT Conference.

The 18th conference will be staged from 11-15th January at Ballina with "A Taste of the North Coast" - see details in this BAAT. (If you are not sure if you have paid up, then email Leanne Sjollemma - treasurer.nswaat@gmail.com)

It has been a bloody cold winter and I hope everyone gets that elusive spring rain and a flush of feed and filling of grain heads.

Carl Chirgwin
President NSWAAAT
Griffith High School



Membership

• Current Association Membership List

June 2014

Valid Until End of:	Given Name	Surname	School / Organisation
2015	Teacher of Agriculture		Dapto High School
2014	Teacher of Agriculture		Gunnedah High School
2014	Teacher of Agriculture	<i>Stephen Reynolds</i>	Koorringal High School
2014	Teacher of Agriculture		Mater Dei Catholic College
2015	Teacher of Agriculture		Moss Vale High School
2015	Teacher of Agriculture		Mudgee High School
2014	Teacher of Agriculture		Pennant Hills High School
2014	Teacher of Agriculture		St Ignatius College
2014	Teacher of Agriculture		St Joseph's College
2014	Teacher of Agriculture		Trinity Anglican College
2014	Teacher of Science	<i>Marcelle Clare</i>	Wee Waa High School
2014	Teacher of Agriculture		Wee Waa High School
2015	Teacher of Agriculture	<i>John Hawkins</i>	Wingham High School
2014	Teacher of Agriculture		Wyong High School
2015	Bryon	ADAMSON	Corowa High School
2015	Megan	ATKINSON	Elderslie High School
2015	David	BAKER	Macarthur Anglican College
2015	Dianna	BEALE	Tumut High School
2014	William	BLOWES	Yeoval Central School
2014	Cathryn	BOURNE	Maitland High School
2015	Graham	BRAMLEY	St Paul's College
2014	Eddie	BUCKINGHAM	Mullumbimby High School
2015	Scott	CALLAGHAN	Mount Austin High
2014	James	CAUGHEY	Hay War Memorial High School
2014	Dale	CHADWICK	Gundagai High School
2015	Carl	CHIRGWIN	Griffith High School
2014	Luke	COLLINS	Yanco Agricultural High School
2014	Steve	CONGDON	Scone High School
2014	Ian	CRABB	Queanbeyan High School
2014	Anita	DE LA MOTTE	Bomaderry High School
2015	Erin	DENNIS	Lake Cargelligo Central School
2014	Rob	DIMMICK	Wellington High School
2014	Claire	DUGGAN	Casual
2014	Christine	DUVER	Woolgoolga High School
2014	Nicole	DWYER	Gloucester High School
2014	Susan	EARL	Red Bend Catholic College
2015	Guy	FAHEY	Albury High School
2014	Rob	FORSBERG	St Joseph's College
2015	Sarah	FOSTER	Dubbo Senior College Campus
2014	Helen	GLOVER	Macarthur Anglican School
2015	Milton	GOWER	Macarthur Anglican School
2015	Richard	GRANT	James Ruse Agricultural High School
2014	Wayne	GREEN	Taree Christian College
2014	Neil	GRIFFITH	Irrawang High School
2014	Belinda	HAIGH	Dubbo School of Distance Education
2015	Graeme	HARRIS	Farrer Memorial Agricultural High School

Valid Until End of:	Given Name	Surname	School / Organisation
2015	Leonie	HARRIS	Frensham
2014	Adrian	HARRISON	St Gregory's College
2015	Lois	HARRISON	Merriwa Central School
2014	Colin	HAWTHORN	Red Bend Catholic College
2014	Stuart	HEMMINGS	New England Regional Office
2015	Michael	HOLLAND	Scone Grammar School
2014	Janet	HOLMES	Mulwaree High School
2015	Peter	HUMPHRIES	Deniliquin High School
2014	Jane	HUNTER	Camden High School
2015	Karen	JOHNSTON	Hurlstone Agricultural High School
2014	Ian	JUDD	St Johns College
2015	Prue	KESBY	St Mary's College
2014	Owen	KNIGHT	Dubbo Christian School
2014	Shayne	LAWRENCE	Dungog High School
2015	Renae	LIDGARD	Molong Central School
2015	Scott	MACKENZIE	GRC Penshurst Campus
2015	Hayley	MAHONEY	Picton High School
2014	Julie	MASLIN	West Wyalong High School
2014	Peter	MATUS	Denison College - Bathurst High School Campus
2014	Greg	McALPIN	Hurlstone Agriculture High School
2014	Johana	McCARTHY	Hillston Central School
2014	Alison	McGEARY	Evans River K-12 School
2014	Ross	McGREGOR	Retired
2014	Michael	McGUIGGAN	St Gregory's College
2014	Jacqueline	McINTOSH	Crookwell High School
2015	Allan	McMILLAN	Wagga Wagga High School
2015	Maree	McNEIL	Shoal Haven High School
2014	Mufutau Afolabi	NASIRU	Sarasas Witaed Suksa School
2015	Bronwyn	NIELSEN	Calrossy Anglican School
2014	Georgina	OAKES	Inverell High School
2014	Lisa	O'BRIEN	Yanco Agricultural High School
2014	Glen	PARTRIDGE	Inverell High School
2014	Trish	PEARCE	Trinity Anglican College
2014	Claire	POLOSAK	Pittwater High School
2014	Georgina	PRICE	Parkes High School
2014	Ellie	QUINN	Yanco Agricultural High School
2015	Graham	QUINTAL	Retired
2015	Renato	RAMSAY	Sydney Distance Education High School
2015	Katie	ROWE	Gulargambone Central School
2014	Elizabeth	RUIS	Windsor High School
2015	David	SAUNDERS	Orana/Coffs Harbour
2015	Nicole	SIMMONS	Warialda High School
2014	Paul	SMITH	Cowra High School
2014	Edward	STEFANSKI	St Gregory's College
2015	Stuart	STOUT	Leeton High School
2014	Maxwell	STUART	Bombala High School
2014	Tanya	SULLIVAN	Corrimal High School

Valid Until End of:	Given Name	Surname	School / Organisation
2015	Leigh	THATCHER	Pittwater High School
2014	Brian	TRENCH	Camden Park Environmental Education Centre
2014	Skye	VAN DEN BERGE	Marion College
2015	Ron	VICTOR	Morisset High School
2015	Nikia	WATERS	Hillston Central School
2015	Gary	WEBB	Finley High School
2014	Wayne	WHALE	St Paul's College
2014	Mark	WHITFELD	All Saints College Bathurst
2015	Melissa	WILLCOCKS	Ashford Central School
2014	Maurice	WOODMAN	Murray High School
2015	Luke	WOODWARD	Richmond River High School
2015	Jennifer	WOODWARD	Byron Bay High School
2015	Jan	YOUNG	Murrumburrah High School
2014	Nathan	ZINGA	Kinross Wolaroi School

NSWAAT Winter Muster

Finally a winter of the 80's – cold, wet and windy – hopefully plenty of snow on the alps too. The 22 attendees of the National Association of Agriculture Educators (NAAE) Conference which was held in the South Island of New Zealand are all to be commended on networking with the fifty other educators from Australia and New Zealand. Many memorable moments were had by all and our Agricultural terminology includes: Judderbars, Jandals, Deery and Chilly Bins.

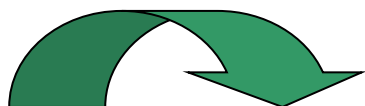
The 2015 State Conference will be staged in Ballina from 11-15th January, 2015. All the information required is attached. A massive thankyou to UNE and the work that they have put into organising their National Conference – the NSWAAT commends their work.

The NSWAAT has gone viral – we have – an email distribution list, facebook page, edmodo page and a webpage. However, you need to become a member of our association to have access to these resources. If you are unsure of your membership status, please email: treasurer.nswaat@gmail.com
Tip: Get your school to pay for it.

Enjoy the rest of 2014 – which is officially '*The Year of Family Farming*' (UN, 2014) and I will see you at Ballina in January.

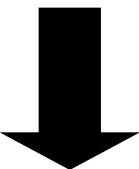
Carl Chirgwin – Griffith High School
President 2013-2015





NSWAAT Winter Muster

**A
g**



TREASURER

Leanne Sjollema
McCarthy Catholic College
PO Box 3486
West Tamworth NSW 2340
treasurer.nswaat@gmail.com

& you require

- *Resources.*
- *Aggie contacts.*
- *Information/subsidies of Agriculture Teachers conferences.*
- *Assistance in your professional duties.*

then you need to join the Association to assist in maintaining:

- *the Association's strength & support across the state,*
- *the place of your subject in the school curriculum,*
- *networking throughout the state,*
- *delivery of a BAAT twice a year,*
(Bulletin Association of Agriculture Teachers)
- *your say in Agriculture & PI teaching issues,*
- *access to professional readings.*

**COMPLETE THE
"APPLICATION FOR
MEMBERSHIP"
FORM ON THE NEXT
PAGE
&
SEND TO THE
ASSOCIATION'S
TREASURER WITH
YOUR PAYMENT.**

NSWAAT WEBSITE

www.nswaat.org.au

Please visit the website and catch up on what has been happening.

There are lots of photos from the Biennial Conference and many resource links to assist your teaching of Agriculture and Primary Industries.

**M
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NSW Association of Agriculture Teachers

TITLE: _____ NAME: _____

SCHOOL: _____

PHONE: _____ FAX: _____

EMAIL: _____

POSTAL ADDRESS: _____

_____ P/C: _____

MEMBERSHIP FEES:

* 1 YEAR: _____ \$60 (2014)

* 2 YEARS: _____ \$120 (2014-15)

NB: Subscription applies for period from January 2014 for either one or two year period.

Subscription Required: _____ Year(s)

Amount Enclosed: \$ _____

Direct Deposit Option: To pay via direct deposit, please post this membership form and use the following details for internet banking transfers.

BSB: 082 939 **Account Number:** 639 757 522

Reference: **Your name and "membership".**

Please forward completed form with payment to:

Leanne Sjollema

McCarthy Catholic College

PO Box 3486

West Tamworth NSW 2340

treasurer.nswaat@gmail.com

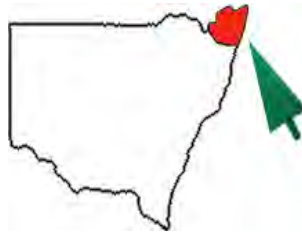
*"The NSW Association
of Agriculture
Teachers is not
registered to collect
GST"*

2015 - NSWAAAT Conference - BALLINA, NSW

A Taste of the North Coast

11-15th January

Located in the north east corner of New South Wales, the Northern Rivers is a rapidly growing region of over 278,000 people. The region is bounded by the Queensland border to the north, the NSW coastal line to the east, the Great Dividing Range to the west that extends from the Queensland border through to just south of Grafton.



Located in the north east corner of New South Wales, the Northern Rivers is a rapidly growing region of over 278,000 people. The region is bounded by the Queensland border to the north, the NSW coastal line to the east, the Great Dividing Range to the west that extends from the Queensland border through to just south of Grafton.



The North Coast region has a predominantly rural outlook and is widely recognised for its unique environment and diverse village communities. Until the late 1970s, dairy farming was a predominant agricultural land use within the region, but this has declined over the last 30 years. At present, sugar cane and beef cattle are still the major industries. However, macadamia nuts, bananas, avocados, stone fruit, flowers, blueberries, rice, soybeans, coffee, tea, passionfruit, pecans and hydroponic lettuce are just some of the diverse industries that can be found within this unique region of NSW

“The Best Little Region in NSW”

Cost:

NSWAAT members \$450
Non-members \$500

Payment due by 30/11/14

18th NSWAAAT Biennial Conference

VENUE: Dunes on Shelly Beach, Ballina

Day 1 – Sunday 11th January (Confirmed)

Time	Requirement
From 3.00pm	Delegates Arrive at Dunes - Ballina
	Pick people up from Ballina-Byron Airport
6.00 - ?pm	BBQ & Drinks (Basic drinks of all sorts – please bring gold coins) Meet & Greet

Day 2 – Monday 12th January (Confirmed)

Time	Requirement
7.00 - 8.00am	Breakfast
8.00 - 9.00am	Registration
9.00 - 9.15am	House Keeping Conference Introduction – Ballina Mayor Welcome to Country - Aunty Bertha Kapeen (please support with a gold coin donation)
9.15 - 10.15am	Guest speaker - "How to get students interested in Agriculture"
10.15 - 10.45am	Morning Tea
10.45am -12.30pm	Louise Fitzroy "From Paddock To Plate" Teaching Resource. UNE "Smart Farming technology" Carl Chirgwin NSWAAAT President.
12.30 - 1.30pm	Lunch
1.30 - 2.30pm 2.30 - 3.15pm	Workshop One <i>Choose from:</i> Steve's Bees UNE Smart Farming Cheese Making Plant Propagation
3.15 - 3.30pm	Afternoon Tea
3.30 - 4.30pm 4.30 - 5.30pm	Workshop Two <i>Choose from:</i> Steve's Bees UNE Smart Farming Cheese Making Plant Propagation
6.00 – 7.00pm	Dinner Preparations
7.00 – 11.00pm	Dinner - <i>A Taste of the North Coast</i>

Day 3 – Tuesday 13th January

Time	Requirement
7.30 - 8.30am	Breakfast – board buses for day tours
8.30am - 4.30pm	Choose 1 from: Tour One: <i>Northern</i> - Coffee Plantation and Processing, Passionfruit Orchard, Sugar Cane farm, Tea Plantation Tour Two: <i>Central</i> - Flower Farm, Macadamia Plantation and Processing, Summerland House Farm (Horticulture), Blueberry Plantation. Tour Three: <i>Southern</i> - Hydroponic Lettuce , Sugar cane and Soybean Farm, Sugar Mill and Cogeneration plant , Sugar Refinery Tour Four: <i>Western</i> - Robotic Dairy, Powdered Milk Plant, Ice Cream Factory
4.35 - 6.00pm	Return from day tours
6.00 – 7.00pm	Dinner Preparations
7.00 - ?pm	Dinner

Day 4 – Wednesday 14th January

Time	Requirement
7.00 - 8.00am	Breakfast
8.00 - 9.30am	Workshop Three Choose from: Olssons Lick Blocks Gallagher Stock Handling Weeds ID
9.30 – 11.00am	Workshop Four Choose from: Olssons Lick Blocks Gallagher Stock Handling Weeds ID
11.00am	Morning Tea
11.30am - 1.00pm	NSWAAT Biennial General Meeting – Attendance is a Priority
1.00 – 2.00pm	Lunch at Dunes
2.00 - 4.30pm	Leisure activities, “friendly” team sports
4.30 - 6pm	Pre-Conference Dinner drinks on the lawn at Dunes
6.30 - ?pm	Conference Dinner & Presentations at Ballina at the Dunes on Shellys. (Formal Attire Required)

Day 5 – Thursday 15th January

Time	Requirement
8.00 - 8.30am	Breakfast & Vacate
8.30 - 10.00am	Transfers to Ballina/Byron Airport
 Thank-you for your attendance. We hope it was a memorable experience! & TRAVEL HOME SAFELY. 	

A camera and/or video camera is a MUST!

WHAT'S INCLUDED?

Sunday 11th Jan

- Picked up from Ballina-Byron airport
- Keys to a room
- Gift Pack
- Conference Shirt
- Conference Merchandise
- BBQ dinner
- Drinks (bring gold coins to assist here please)

Monday 12th Jan

- Breakfast
- Morning Tea
- Lunch
- Arvo Tea
- "Tastes of the North Coast" dinner
- Presenters
- Workshops & materials
- A room

Tuesday 13th Jan

- Breakfast
- Packed morning tea and arvo tea
- Bus trip and entry to field trip activities
- Lunch (Own Cost)
- Presenters
- Gifts
- A room

Wednesday 14th Jan

- Breakfast
- Morning tea
- Lunch
- Workshops & materials
- A room
- Conference pre-dinner drinks
- Conference meals
- Drinks at conference dinner (purchase own)
- Post dinner drinks

Note: Attendance at the Biennial General Meeting is a must for the longevity of the Association

Thursday 15th Jan

- Breakfast & Free goodbye hugs
- Transport to Ballina-Byron airport

FINAL Registration Due by 30/11/14

Conference Registration

Name: _____	School: _____
Address: _____	
Number Attending: ☐	Room(s) Required: ☐
Pickup Requirement: Yes ☐ / No ☐	Location of Pickup: Ballina – Byron Airport
Time Required to be Picked Up: : :	Day & Date Required to be Picked Up: _____
Drop off Requirement: Yes ☐ / No ☐	Location of Drop off: Ballina–Byron Airport
Time Required to be Dropped Off: : :	Day & Date Required to be Picked Up: : :
Dietary Requirements: _____	
Shirt Size: _____	

Direct Debit

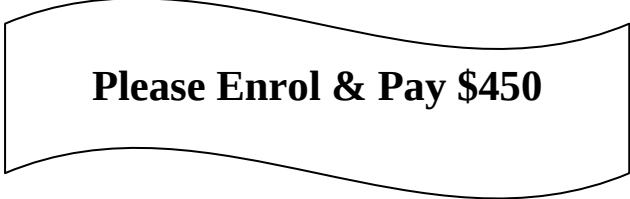
Name:

BSB: 082 939

A/C No: 639 757 522

Reference: **Your Name** and '**Conference**'

OR



Please Enrol & Pay \$450

Send Registration Form and/or Money Payment to:

Mick Melino
 NSWAAAT Conference Chief
 St John's College
 PO Box 6
 Lismore
 NSW 2480

Fax: (02) 6626 2626

Charles Mullavey Memorial Prize 2013

First in HSC Agriculture - Dana Song

Dana Song of James Ruse Agricultural High School was first in 2 Unit Agriculture at the 2013 HSC with a mark of 99 and as a result receives the Charles Mullavey Memorial Prize.

This is the result of a combination of many things. She has a very high academic ability. She is a dedicated student. She has support from her family and she has had the privilege of doing Agriculture at James Ruse with its experienced and committed staff.

Her teacher for the HSC was Sofia Hameed and Dana's first in the state was the first time that Sofia has achieved this outstanding result.

Dana's parents migrated to Australia from China in 1989 and Dana was born in Australia. Dana attended Castle Hill and North Rocks OC Public School prior to entering James Ruse in Year 7.

This year in Year 12 she is studying Modern History, Chemistry, Extension I English, Extension I Mathematics and Extension II Mathematics. Dana is undecided as to what she will study at University next year.

At school Dana is involved with Amnesty, Poultry Squad, Library and Canteen assistance. Dana enjoys shopping, K-POP dancing and spending time with family.

The Charles Mullavey Award is sponsored by the NSW Association of Agriculture Teachers. It was formally presented to Dana at the HSC Awards Day in February where the school recognises the achievements of the HSC class of 2013.

The perpetual trophy is a copper art picture of draught horses pulling a mouldboard plough and is hung in the school whose student topped the state in Agriculture. The student receives a smaller engraved trophy to keep for themselves.



Agriculture teacher Sofia Hameed and Dana Song

First in Primary Industries 2013

Laura Nesbitt, Hurlstone Agricultural High School

Laura hails from Cooma and comes from a 5th generation farming background. An active interest in the running of the family farm led to a determination to get involved in and learn about agriculture.

She attended St Patrick's Parish School, Cooma from kindergarten through to year 10 where she pursued her interest in Agriculture as an elective in Years 9 and 10. She came to Hurlstone as a boarder for Years 11 and 12 so that she could extend her interest by studying both Agriculture and Primary Industries.

Laura has long had a passion for caring for animals from an early age and has actively involved herself in many aspects husbandry, at home, at school and through work experience. It is this commitment that has seen her achieve her goal of studying Veterinary Science at Charles Sturt University, Wagga

She says the study of primary industries gave me some extra exposure, targeting all aspects of the agricultural industry. It gave me the background that I believe will benefit me in my future career returning to a rural area to practice in a mixed practice as a veterinarian who is informed about the industry and its demands and challenges that it places on the farmer / operator.

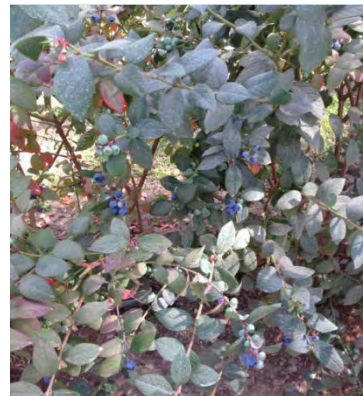


PI Teacher Greg McAlpin and Laura Nesbitt

UNE Agricultural and Environmental Science Teachers A Report on the Professional Development Conference 26 - 29 June 2014

The objective of the conference was to highlight current research and new technologies in agriculture and environmental science whilst showcasing the facilities UNE has on offer. Part of the conference programme was six Field Trips around the New England and North West region. This is a report on the Horticulture and Winery Tour.

An eager group heads to the Coffs Coast to look at the horticultural industries of the area. After a long trip to get there we arrived at our first stop which was at Costa's Berry Farm north of Woolgoolga. Here we had a talk by the farm manager, where we looked at the farm's Blueberry and Raspberry production systems.



After we had finished our tour of the farm, we headed back to Woolgoolga to have lunch by the beach, which was a welcome break from the hinterland and a chance to experience the warmer weather on the coast.

From here we had to a local banana plantation, where we walked around part of the plantation, with our guide demonstrating some of the tasks carried out on a typical day.

After the tour of the plantation and packing shed, we had a little delay for some time while we waited for the bus driver to get the bus going.



Once the bus was started we headed to our final, the Raleigh Winery. Here many of us sampled the wines, ports and brandy crèmes and bought some of the delights that we were offered.

Jade Smith



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Chemical Card training done at your own pace without leaving home!

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costs are:

- Initial course (if you have never completed your Chemical Users Course) = \$165 + GST
- Refresher course = \$165 + GST

If you would like to have a course held in your area we need a minimum of 10

candidates and costs are:

- Initial course = \$280 + GST
- Refresher course = \$190 + GST

When you have successfully completed the course you will receive your Chemical Users Card in the mail, which is valid for 5 years.

To register or to enquire further please contact us:

AJM Livestock Solutions

Ph: 0409 667 011

Email: office@ajmlivestocksolutions.com.au

Website: www.ajmlivestocksolutions.com.au





Primary Industries Education Foundation



MEDIA RELEASE

3 July 2014

Government boost to agriculture in schools

Learning about Australia's primary industries will get a boost today with the Australian government announcing \$2 million funding to develop classroom and career resources.

The Primary Industries Education Foundation (PIEF) will use their portion of the funding to produce 17 units of study, from Kindergarten to Year 10, integrating primary industries into all areas of the Australian curriculum.

The resources will be interactive, include the latest online multimedia tools and will be written by nationally and internationally recognised experts. Resources will include videos featuring Australian primary producers discussing technical aspects of production. For example, a unit of inquiry based around sustainability may feature producers discussing drip-feed irrigation to save water or the advantages of no-till cropping to soil health.

"We welcome the Australian government's on-going support of primary industries education in our schools," said Dr Cameron Archer, Chair of PIEF. "No other discipline brings everything together like primary industries – the environment, the economy and people."

In 2012, PIEF research found that student knowledge of food and fibre production had declined to worrying levels. Seventy five per cent of students thought cotton socks were an animal product and 45 per cent of students could not identify that everyday lunchbox items such as a banana, bread and cheese originated from farms.



Thanks to government funding, more students will learn about food and fibre production and careers in primary industries.

This project will assist students learn about the source of their food and fibre and provide teachers with real-life, relevant and engaging materials that will allow them to implement the Australian Curriculum. Teachers who may not have much experience in teaching about primary industries will be supported by videos from other teachers explaining how to best use the resources.

"Primary industries are a great vehicle for integrated learning and that is what contemporary education is about - integration and understanding," said Dr Archer. "These funds will help us enrich the curriculum and support teachers. This funding provides an exciting opportunity to really add value."

The funding was jointly announced by the Minister for Agriculture, Hon Barnaby Joyce MP and the Minister for Education, Hon Christopher Pyne MP, today.



Primary Industries Education Foundation



Selected snippets from the February - June 2014 Newsletters Foundation News

Schools program stepped up by the Australian pork industry

Primary Industries Education Foundation (PIEF) member, Australian Pork Limited (APL), recently released their new Australian Pork Industry Education Resources kit at the Pan Pacific Pork Expo.

This educational resource is designed to improve student knowledge of where their food comes from, how it is produced and ultimately the important role primary industries play in everyday lives. It combines the latest science with sustainability education to help school communities understand climate change and take positive steps to foster environmental sustainability.



L - R Dr Darryl D'Souza, APL General Manager Research and Innovation, Angela Colliver and Ben Stockwin, PIEF Chief Executive Officer at the launch of the new pork industry education resources

Initiated by APL and supported by PIEF, the Australian Pork Industry Education Resources recognise and promote the fundamental role Australian pork farmers play in producing quality pork, tackling climate change and protecting the environment into the future.

The resource can be downloaded at: <http://australianpork.com.au/library-resources/education-toolkit/>

PIEF discusses increased student interest in agriculture

The Board recently met and discussed the recorded upturn in enrolments in agricultural courses in Australian Universities.

This is a wonderful trend Dr Cameron Archer Chair of the Foundation said, *"We are pleased to see the stronger interest in agricultural courses and we hope this continues into the future. All the statistics indicate that there is a continuing shortage of well-trained people to work in the country's primary industries and it is hoped that this year's intake of students will result in more graduates being available to service industry needs later in this decade."*

"Primary Industries Education Foundation aims to support learning about primary industries in schools and encouraging young people to consider a career in primary industries. It is heartening to see the increase in enrolments and we hope this continues into the future. Australia earned \$32.5 billion in 2010-11 through export income from its primary industries and we have to continue to remain competitive into the future. We can only do this through having a well trained and effective work force at all levels."

"We must not become complacent as there are so many industries competing for the hearts and minds of school leavers. Our industries offer really interesting opportunities and we all must continue to promote these careers. The Foundation knows that learning in primary school is a strong influence on career choices and we continue to focus on initiatives from the very early school years to year 12," Dr Archer said.

Primezone Educational Resources - Coming soon!

PIEF is on track to release new, exciting, cross-curricula and cross industry resources later this year. The resources are designed to introduce young people to food and fibre production and primary industries in Australia. Not intended to be an exhaustive educational resource, they will raise the awareness of school-aged students about the influence of natural and human factors on the extent of food and fibre production in Australia. It also supports investigations of the past and present and includes visioning a range of futures for food and fibre production. Contact us for more information.



Member News

New! Target 100 Study Guide - Food for the Future

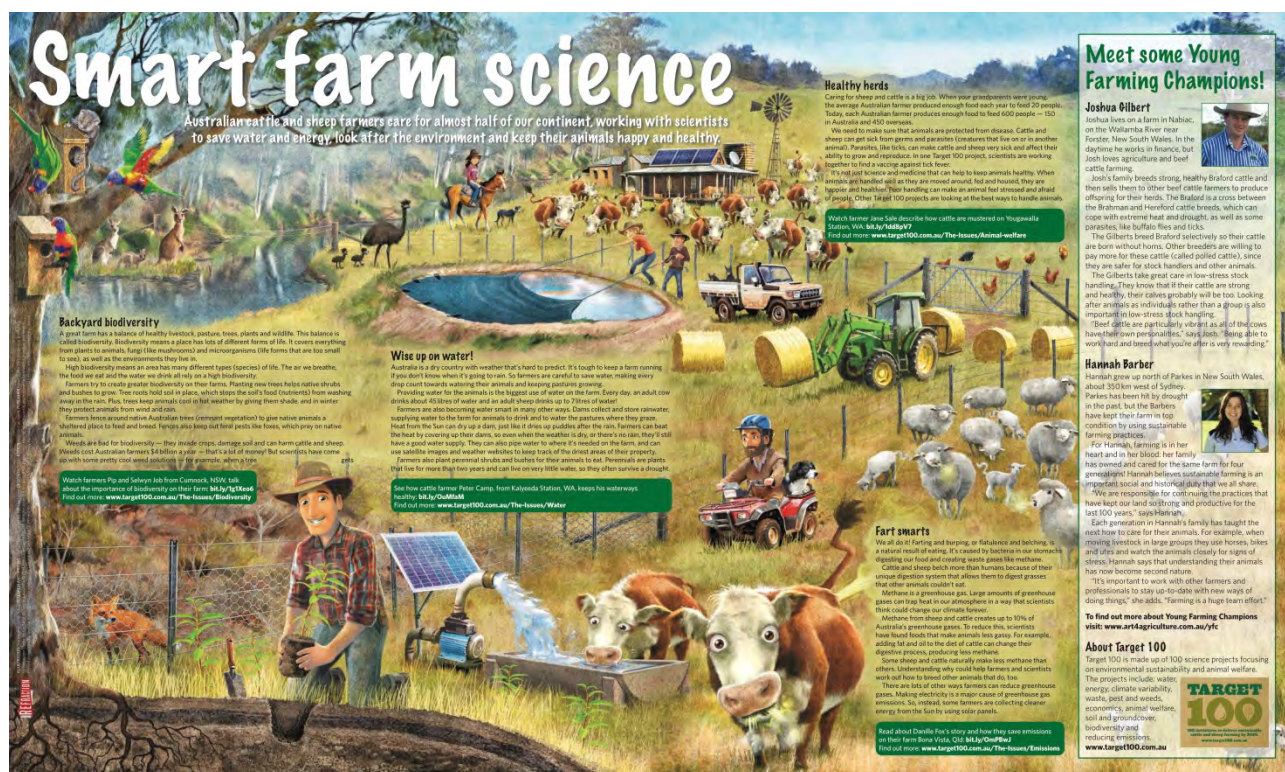
This recently published study guide, outlines the challenges cattle and sheep farmers face and how they are working with scientists and funding new research to meet the challenge of feeding the world of the future. The notes in this study guide offer both variety and flexibility of use for the differentiated classroom. Teachers and students can choose to use all or any of the five sections – although it is recommended to use them in sequence, along with all or a few of the activities within each section.

Target 100 study guides are available for download at:

<http://www.target100.com.au/Tips-resources/Sustainability-study-guides>

Smart Farm Science Posters

Meat and Livestock Australia (MLA) has recently completed the print run of its new primary schools poster – Smart Farm Science. This A1 sized poster has been distributed to 3500 metropolitan primary schools across the country. Additional copies can be requested by emailing Mary-Jane Morse at mmorse@mla.com.au



Industry News

Careers in Agriculture website re-launched

The Careers in Australian Agriculture website (<http://ausagventures.com/>) created in 2012 has been relaunched under the new name of Ausagventures. Ausagventures provides secondary and tertiary students interested in Australian agriculture, with information on studying, training and careers in agriculture. The site also hosts a number of blogs about experiences in agriculture and provides the only nationwide calendar featuring professional and social events in the agricultural industry. Ausagventures will be further developed in 2014 and is currently looking to connect with secondary and tertiary institutions and their teachers. If you are interested in connecting with Ausagventures please contact Stephanie at:

stephanie.coombes@ausagventures.com

University Survival Guide for Rural and Regional Students

A new University Survival Guide for Rural and Regional Students has been released this week by the Country Education Foundation of Australia. (<https://cef.org.au/survival-tips-rural-students/>) The Guide includes tips, advice and resources for country kids (and their parents!) heading off to Uni and it has information on discounts and student concessions.

Rural Career Guide

Rural Skills Australia have released the new Rural Career Guide. The Guide is a combined resource for students and job seekers, new entrants to the industry, parents and educators, counsellors and employers. It features career descriptions, interactive displays, education and training options to highlight career pathways in rural and related industries. More information is available at <http://www.ruralcareers.net.au/career-guide/>

FAO Food and Agriculture statistics

The Food and Agriculture Organization of the United Nations (FAO) collates and disseminates food and agriculture statistics from approximately 245 countries and 35 regions from 1961 to the present. They have developed the infographic below to showcase a small sample of the data they collect. More of the FAO's agricultural statistics are available at <http://faostat3.fao.org/faostat-gateway/go/to/home/E> and may be a useful classroom resource.

VET Fee Help for Diploma of Horticulture students

The Riverina Institute's Primary Industries Centre (PIC) in Wagga Wagga has a new Diploma of Horticulture course by distance mode and eligible students can enrol now and pay later. VET Fee Help is an Australian Government loan scheme to assist eligible fee-paying students undertaking higher level vocational education and training (VET) courses with paying their tuition fees. The demand for flexible delivery of the Diploma of Horticulture is growing for both new industry entrants and those wishing to upgrade their existing qualifications. Graduates work in council parks and gardens, private landscaping businesses, wholesale and retail nurseries, fruit production and private gardens. Contact Kim Thomas on 02 6939 5030 or course information on 1800 441 244.

More information is available at: <http://www.rit.tafensw.edu.au/campuses/pic>

FREE Seafood Training Videos

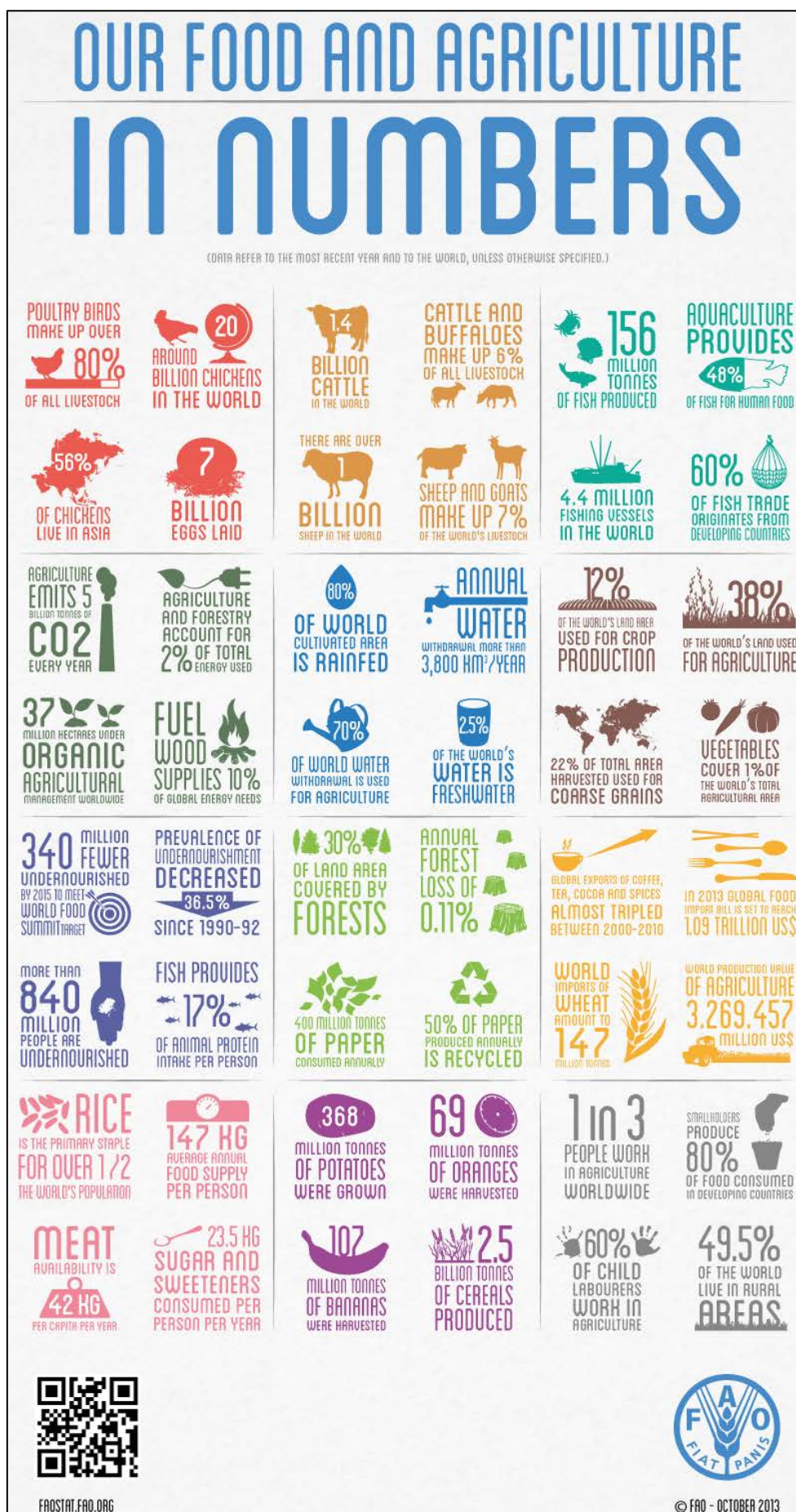
The Australian Seafood CRC has created a series of training videos about Australian seafood to help increase knowledge for national commercial cookery and apprentice chef training courses. Six popular Australian species - rocklobsters, oysters, farmed Barramundi, Snapper, Sardines and prawns - are followed from harvest to restaurant door. The training package covers processing and supply, how the seafood gets to the restaurant door, recommended procedures for receiving and checking the condition of the seafood and cooking techniques.

The videos can be downloaded at: <http://vimeo.com/fishfilescheftutorials> or viewed on YouTube at: <https://www.youtube.com/user/FRDCFishfiles>

New rice growing videos

The Ricegrowers' Association of Australia, in conjunction with SunRice, has produced a new series of short videos which tell the paddock to plate story of rice in Australia. These are designed for school aged children and those with no knowledge about the rice industry.

More information at: <http://www.rga.org.au/education/the-story-of-rice.aspx>



The infographic is available for download at:
<http://www.fao.org/resources/infographics/infographics-details/en/c/203558/>

Conferences & Professional Development

New online courses by EverTrain

Professional development for teachers and supplementary student resources on managing carbon, soil biology, salty and climate risk are now available with EverTrain online courses. EverTrain is a NSW Department of Primary Industries e-learning initiative funded through the Future Farm Industries Cooperative Research Centre (FFICRC). It is an education and extension training system that combines online training with face to face workshops to make training more accessible for land managers. on the latest research and industry advice and includes accredited courses and workshops that can be tailored to meet client needs. Learn more about EverTrain courses at:

<http://www.evertrain.edu.au/>



SCIENCE TEACHERS' WORKSHOP 3-7 NOVEMBER 2014



We are excited to be offering the highly successful Science Teachers' Workshop again this year which will run across multiple science disciplines over a one-week period. These professional development courses are suitable for high school science teachers of all levels – whether you're just starting out, teaching in a new area, or have years of experience – our program has something for you.

WORKSHOP	DATES	COST (INC GST)
AGRICULTURE	6 NOVEMBER 2014	\$210
BIOLOGY	7 NOVEMBER 2014	\$210
CHEMISTRY	5-6 NOVEMBER 2014	\$395 (\$210 – 1 DAY)
PHYSICS	3-4 NOVEMBER 2014	\$395 (\$210 – 1 DAY)

Agriculture

The one-day Agriculture program is a dynamic combination of lectures and workshops, providing content for teaching the HSC syllabus. The workshop this year is structured to address the innovative research in the three elective areas – *Agri-food, Fibre & Fuel Technologies, Climate Challenge and Farming for the 21st Century* and the core topic *Plant and Animal Production*. Professional academic staff will provide relevant and current examples in a variety of delivery methods - from lecture to lab-making for an interactive workshop event.

The day will also include a workshop on overarching teaching methodologies such as where to find resources and how students learn most effectively. A special plenary lecture on agriculture and aboriginal knowledge is also a feature of the day. This is a fully catered event, where you will have plenty of opportunity to network with fellow teachers and the friendly staff of the Faculty of Agriculture and Environment.

This course is BOSTES approved for 6.5 hours of professional development. A financial assistance package has been developed to ensure that eligible teachers are supported and given opportunities to access teaching support and professional development regardless of the school's financial or geographical disadvantage.

Lectures include: *Agriculture and Indigenous Knowledge, Agri-food, Fibre and Fuel Technology Biotechnology in Agricultural Systems Plant and Animal Production Animal Hormones: regulating reproduction and behaviour Climate Challenge Sustaining Valuable Resources – Water*

Workshops include: *Finding and Teaching New Resources Plant and Animal Production Interactive Plant Hormones Farming for the 21st Century Livestock in Future Landscapes*

For more information, program and registration go to:

http://sydney.edu.au/science/outreach/teacher_resources/teachers_workshop.shtml

As you may be aware I was helping Amy and Jade at the recent UNE Agricultural and environmental science teachers conference. I did a presentation to you in short just before the conference dinner but didn't really have enough time to show you what PICSE has to offer to you and your students. So I thought I'd write this email and those of you who are interested in contacting me for more information or would like me to come to your school please email me back or use my other contact details below.

PICSE is a national strategy of collaboration between universities, their regional communities and local primary industries, to attract students into tertiary science and increase the number of skilled professionals in agribusiness and research institutions.

The annual PICSE program involves the integrated activities of:

- Year 10, 11 & 12 students are exposed to the cutting edge scientific research and the exciting opportunities for science graduates in their region.
- Primary, Middle and Secondary students are engaged in the undertaking of scientific investigations and developing knowledge of scientific methodologies.
- Teacher Professional development.
- A 5 day industry science camp in vacation period, involving in-depth consideration of career and research opportunities for science graduates. Postgraduate students from local research institutions and scientists working in local primary industries provide assistance at these camps. (Same students selected for the camp and placement.)
- A 5 day industry placement for year 11 & 12 students in their vacation period with a team of scientists in specific local industries or research organisations. At the end of the placement, students provide a written and verbal report to other scholarship students, industry mentors and parents.
- Production of science teaching resources that integrate into pre-tertiary science curricula and use practical primary industry science examples.
- Science and Engineering Investigation awards event. Students (primary, Middle and Secondary) conduct their own investigation and present it at a culminating event. The judging of this event is based on poster display and the student's verbal communication of their project. Monetary prizes are sourced from local community donations and specific PICSE national funders.
- One week Internships for secondary science teachers (in vacation period) and Undergraduate Science Students with scientists in specific local industries or research organisations. At conclusion of placement, they produce a written report to demonstrate value and relevance.

Please contact me for more information or if you would like me or a PICSE representative to come to your school and we will endeavour to help.

Kind regards

Carissa Anderson

Science Education Officer

Primary Industry Centre for Science Education (PICSE)

Tel: (02) 6775 1794

Mobile: 0437 781 135

Address: Armidale Post Shop, PO BOX 1294, Armidale, NSW, 2350

www.picse.net

Science for Growth Awards - an initiative of PICSE and Dow AgroSciences. An awesome science opportunity for school students. Go to www.scienceforgrowthawards.com.au

Agriculture Resources

The amendments to the HSC syllabus content (October 2013) come into force for the 2015 HSC. It is critical that all teachers know about these changes and program accordingly. They are on the BOSTES website: http://www.boardofstudies.nsw.edu.au/syllabus_hsc/agriculture.html

There will be some new activities added to the HSC Online Agriculture node in the near future.

1. A research paper relating to salinity tolerance in barley varieties (applicable to electives 1 and 3), and
 2. An update and expansion of the milk marketing activity in the product study section.
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There are some good activities relating to milk production and marketing, sustainable farming, pasture production, fodder cropping, cattle diseases and workplace health and safety on the Camden Park Environmental Education Centre website. Teachers can find them here:

<http://www.camdenpk-e.schools.nsw.edu.au/fieldwork/secondary/farm-case-study-resources>

These resources are easily adapted to a wide range of situations and are definitely NOT just applicable to the Number 9 dairy at Camden Park.

Animal Welfare and Husbandry Worksheets

courtesy of Graham Wilson, Mudgee High School

Animal Welfare

Download the resource document “Model Code of Practice for the Welfare of Animals – Cattle” from the CSIRO website: <http://www.publish.csiro.au/pid/4831.htm>

1. Write a definition for animal welfare

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2. Outline why animal welfare is important (being ‘Law’ is not an acceptable answer)

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3. From page 3, summarise the basic needs of cattle

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4. Do you expect these needs to be the same for most farm animals? Explain your answer

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5. Go to page 7. Define “tethering”

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6. Explain why it important to accustom animals to tethering before long-term restraint

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7. From page 15, summarise the recommended design standards for yards and ramps. At least 4 separate points should be made.

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8. From page 18, define “spaying” and explain why it is used

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9. From page 18, explain why tails are sometimes removed (docked) from cows

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10. Point 5.10 on page 20 outlines the special care to be taken prior to calving. Make a summary of these points

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11. Define “trimester”. Explain why it is important to manage the feed of pregnant cows and heifers

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12. Define "colostrum" and explain why it is essential to the young calf

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13. Outline the guidelines for weaning

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14. Define "agistment"

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15. From page 28, outline the factors that affect water consumption

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16. Page 30: list the factors that affect feed quality and quantity requirements

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17. Define "lactation"

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Bloat

Download the resource “Bloat” from http://www.dpi.nsw.gov.au/_data/assets/pdf_file/0009/111411/bloat.pdf

1. Describe the type of pasture that caused the greatest risk of bloat.

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2. Explain how these feeds create bloat. In your answer, describe how the normal process of digestion occurs and outline how this is disrupted.

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3. Explain why bloat is considered a disease. Your teacher should help you by defining the term ‘disease’.

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4. Is bloat an infectious disease? Explain your answer.

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5. Outline the signs of bloat in cattle.

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6. Outline the treatment of bloat during the different stages.

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7. Outline the preventative measure that can be taken.

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Grain Poisoning

Download the resource “Grain Poisoning of Cattle and Sheep” from
<http://www.dpi.nsw.gov.au/agriculture/livestock/sheep/health/grain-poisoning-cattle-sheep>

1. Explain the cause of grain poisoning.

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2. Outline the factors that affect susceptibility to grain poisoning.

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3. Outline the management that should be used to prevent grain poisoning.

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4. Outline the treatment for grain poisoning.

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Enterotoxaemia (Pulpy Kidney)

Download the resource “Enterotoxaemia in Cattle” from

<http://www.dpi.nsw.gov.au/agriculture/livestock/health/specific/cattle/enterotoxaemia-cattle>

1. Pulpy kidney is caused by bacteria that produce a toxin (poison). Outline the conditions that allow this usual resident of the gut to cause illness.

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2. Farm managers should try to prevent rather than treat this disease. Outline the preventative measures you should undertake.

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3. Outline the rules for vaccine storage and use.

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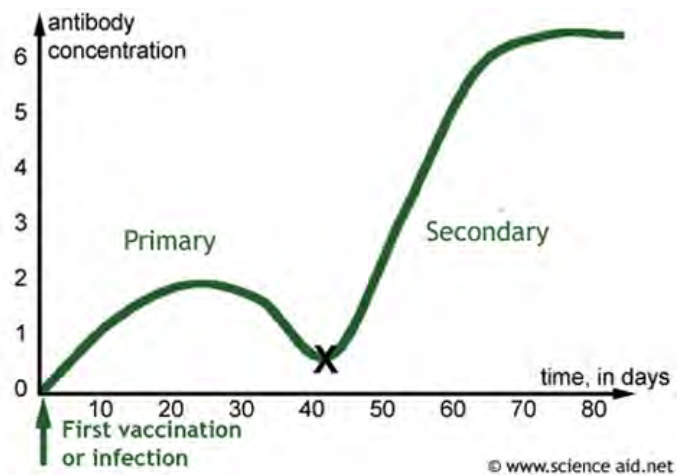
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4. Sheep and cattle require annual boosters of the vaccine. Research the role of booster doses to stimulate the immune system.

This diagram shows a general pattern of immunity development. It is not specifically for enterotoxaemia in livestock



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5. Humans don't need annual booster vaccine. Cattle at high risk may need vaccinating every 4-6 weeks. What does this suggest about the immune system of humans when compared to some breeds of livestock?

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Castrating Calves - Worksheet

Download the resource "Castrating Calves" from

<http://www.dpi.nsw.gov.au/agriculture/livestock/beef/husbandry/general/castrating-calves>

1. Define castration.

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2. Outline reasons for and against castration of bulls

Benefits of castrating bulls	Benefits of leaving bulls entire

3. Explain the cause of 'dark cutting meat'.

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4. Outline the reasons why dark cutting meat should be avoided.

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5. Explain why castration should be performed on young animals.

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6. Explain the need for good hygiene when marking calves.

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7. Describe the recommended management procedures after castration.

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Dehorning Cattle - Worksheet

Refer to the file "Dehorning Cattle" at:

<http://www.dpi.nsw.gov.au/agriculture/livestock/beef/husbandry/general/dehorning-cattle>

1. Outline why dehorning is recommended for horned cattle.

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2. Explain why breeding polled cattle is preferred to dehorning.

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3. Outline the welfare (health, stress, hygiene) factors to consider when dehorning.

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4. Define "cauterise". Explain the advantages of heat removal of horn.

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5. Outline the difference between dehorning and 'tipping'.

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6. Outline why horn tipping is sometimes used in place of dehorning.

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Generation2050

Project feed the world

Are you in Year 10, 11 or 12 in 2014? Are you studying and enjoying agriculture and/or science at school? Are you passionate about agriculture and want to undertake tertiary study in this area? Would you like to experience UNE life and see the opportunities that the UNE School of Environmental and Rural Science can provide you with?

Then the University of New England's **GENERATION 2050** is for you!

100 passionate agriculture students from around Australia will be chosen to take part in UNE's Generation2050: Project Feed the World conference.

When? Sunday 7 December to Wednesday 10 December 2014

Where? University of New England, Armidale, NSW

Cost? Free! All accommodation in a UNE residential college, meals and activities will be provided free of charge.

Travel to UNE will also be subsidised at the following rates. UNE will assist in organising your travel to and from the conference. Buses will leave from major cities to transport students who travel by plane to UNE. These cities include but are not limited to Newcastle and Brisbane.

KM from UNE	AMOUNT
200km or less	\$100
200km -500km	\$200
500km – 1000km	\$300
1000km – 1500km	\$350
1500km – 2000km	\$400
2000km or more	\$500

How? Visit www.generation2050.com.au and complete the online application form. As part of the application you will need to complete a short photo essay and provide the contact details of a teacher who is willing to provide you with a reference. You will also find a draft program online.

Applications close **Monday 1 September** and students will be notified of the outcome of their application on **Monday 6 October**.

If you have any questions please contact Amy Cosby on (02) 6773 2196 or acosby2@une.edu.au



School of Environmental
and Rural Science



Generation2050

Project feed the world

Sunday 7 December

12:00pm-5:00pm	Check into Duval College accommodation College and University tours
1:00pm – 2:00pm	Welcome Lunch
6:00pm – 6:10pm	Official Opening of Generation 2050
6:10pm – 6:30pm	Introduction of UNE Staff and Group Leaders Housekeeping
6:30pm – 7:30pm	Dinner
7:30pm -9:00pm	Trivia night
9:00pm – 9:30pm	Bedtime

Monday 8 December

6:30am – 7:30am	Breakfast College
7:30am – 9:00am	Depart UNE for Field Trips
5:00pm	Arrive back at College
5:15pm – 6:30pm	Free time
7:00 – 7:30pm	Dinner
7:30pm – 8:00pm	International Research at UNE
8:00pm-9:00pm	Public speaking workshop
9:00-9:30pm	Bedtime



School of Environmental
and Rural Science



Schools in the News

Hay War Memorial High School

This year saw Hay War Memorial High Schools Aberline Dorper & White Dorper stud take twelve sheep to the Sydney Royal Agricultural Show. The sheep contingent consisted of seven White Dorpers, one ram and six ewes and five Dorpers, two rams and three ewes. Twelve students and two teachers accompanied the sheep, with seven of the twelve students attending their first ever show and some of them handling their first ever sheep.



Results from the show have done the school proud with a total of sixteen ribbons and a perpetual trophy, including two reserve champions.

- Our first ribbon at the 2014 Sydney Royal Easter Show was 1st place to Annie in the 2/4 tooth ewe category handled by Emerson Hedt.
- 2nd place to Shadow in the ewe born April/May 2013 lambs teeth handled by Monte Barnes.
- 1st place to Betty in the ewe born after August 1st 2013 lambs teeth handled by Kynan Headon.
- Reserve Grand Champion Dorper Ewe won by Betty handled by Kynan Headon.

- 3rd place Peter Taylor Group, one ram and two ewes milk teeth, Jumbo handled by Jack Gibson, Betty handled by Kynan Headon and Shadow handled by Monte Barnes.
- 3rd place to Ace in the ram born after 1st of August 2013 lambs teeth handled by Toby Bevan.
- 1st place to Willow handled by Ebony Crighton, 2nd place to Maple handled by Jock Crighton and 4th place to Rosie handled by Belle Barnes in the ewe born April - May 2013 lambs teeth.
- 2nd place to Essence handled by Kevin Cai in the ewe born June - July 2013 lambs teeth.
- 3rd place to Alice handled by Darcy Cullenward in the ewe born after August 1st 2013 lambs teeth.
- Reserve Grand Champion White Dorper ewe won by Willow handled by Ebony Crighton.
- 1st place to Ace handled by Luke Arandt, Willow handled by Ebony Crighton and Maple handled by Jock Crighton in the Peter Taylor Group.
- 2nd place to Ace handled by Toby Bevan in the Objective Measurement Class for White Dorper sheep.
- 3rd place to Jumbo handled by Jack Gibson in the Objective Measurement Class for Dorpers.
- ABERLINE WHITE DORPERS are the MOST SUCCESSFUL WHITE DORPER EXHIBITOR at the 2014 Sydney Royal Show.
- 1st place to Kynan Headon, 9th place to Keiran Pngiaro and 16th place to Emerson Hedt in the Meat & Dual Purpose Breed Sheep Handlers Competition for 10 years and under 14 years of age.
- 5th place to Luke Arandt in the Meat & Dual Purpose Breed Sheep Handlers Competition 14 years and under 20 years of age.

Three of our White Dorper sheep remained at the Sydney Royal Easter Show. We were asked if our sheep could be part of the sheep display to be viewed by the "Royals".

Planned shows for the rest of the year include the Holbrook Sheep and Wool Fair, Australian Sheep and Wool Show in Bendigo and the National Dorper and White Dorper show and sale in Dubbo.

Queanbeyan High School

Queanbeyan High Agriculture students successfully defended their title as the best cattle finishers at the 2014 Royal Canberra Show. It is no easy task to program the correct amount of feed 7 days a week for 5 months to have the ideal amount of fat on the animal on a particular day in its life. They competed against 70 steers prepared by cattle studs & some of the best agricultural schools in the state.

QHS Farm Assistant and cattle producer Mr John Slater spotted a calf with potential at the Braidwood saleyards in July 2013. He bought the pen but did not bring the steer into school until he was sure that it had the right temperament to be safe with children. He was a Speckle Park x Angus and the students named him Oreo. Two Limousin x Angus steers were also purchased with one of them being a full brother to our 2013 Grand Champion.

Students taught them to lead on the halter and groomed daily during recess and lunch. They even travelled up to Jerangle in the school holidays to continue the preparation.

Finally they are off to the show for clipping and weighing. Oreo weighed in at 481kg, James 579kg and Perry 595kg. First up was the Cattle Paraders competition with over 200 competitors. Every junior parader was able to parade and present their animal without any of them losing control of these large animals. Codey Flack and Bell Paisley-Dew performed well in the 15 years heats. Ellen Birtles and Penny Slater competed against the most experienced paraders in the Open class. Both did very well with Penny taking the 4th place ribbon.

Then the steers were judged live with judge assessing how much muscle and fat he thought each animal was carrying. Oreo placed 3rd in the heavy domestic class while James was 3rd in the heavy export class. After the auction, all of the steers were trucked to Cootamundra for slaughter. The cattle, the paraders and the carcasses are all assessed by qualified industry experts.



HSC Agriculture student Ellen Birtles

With the skins off, the quantity and quality of meat and fat could be measured. Oreo scored 92 points to win his class. James scored 87.5 to take 2nd in the export class. Oreo then competed against the winners of the light and medium domestic classes plus the export class winner. Oreo had the highest score and was awarded Grand Champion carcass of the Show.

Thanks must go to John & Steven Slater for supplying quality cattle, all of the Agriculture students who prepared the cattle and in particular the Show Team, Farm Assistants Mr Slater and Mr Robertson for the care of the cattle, Mr Crabb's parents for financial support, Mrs Bristina for her interest and helping in the holidays, all of the staff who covered classes and allowed students out of class to compete. A great team result for Queanbeyan High.



Presentation of Royal Canberra Show Champion Carcass award by Andrew Wishart Landmark Goulburn to Queanbeyan High School HSC Agriculture students Ellen Birtles and Haydan Hales and Agriculture Head Teacher Ian Crabb

Queanbeyan High School Frizzle bantams at 2014 Sydney Royal Easter Show

Queanbeyan High competed in 12 Frizzle bantam classes, winning 11 of them and also taking out Champion White, Cuckoo, Black and overall Frizzle breed Champion. Extra classes were scheduled this year for black and cuckoo Frizzles and there was a high standard throughout the breed classes. A highlight was winning an interbreed award in the Breeding Trio class.

Frizzles are used to teach all aspects of poultry production (except broilers) in Agriculture lessons. They are also used by Science and Biology classes to study their unique feather genetics.



Champion Black and over Frizzle Bantam breed Champion with Show Team students Kyah Wolf and Keely Warren.

Norman Lethbridge Award



Hamish Fuller St Ignatius College- Riverview, Giles Ditchfield CB Alexander College, Tocal, Alexa Hearn TAFE Western Sydney, Madeleine Medak Colo High Nth Richmond, Christine Erby Forres Angus Dungog & NSW State Committee, Brendan Fuller Marion College (Winner), M/s Sky Van den Berge Ag Teacher Marion College, Gillian Boehm Cooma, daughter of the late Norman Lethbridge, Mr Hugh Munro Booroomooka Angus, Bingara, Mr Richard Buck Secretary, NSW State Committee. Absent Gabby Elias All Saints College Bathurst

This is the 12th year of the Norman Lethbridge award that named in memory of the NSW State Committee past secretary and well known stock and station agent - Norman Lethbridge who served the NSW State Committee from 1983 until 1994.

The award was announced earlier in the month and we are pleased to have presented this prestigious award to **Brendan Fuller from Marion College** at Kenthurst at the Sydney Royal Easter Show on Saturday 12 April. The award was sponsored by Booroomooka Angus Stud, Bingara and the Angus NSW State Committee gratefully Acknowledge Booroomooka's continual support of this award.

Other results for this highly sought after award were:

2nd Alexa Hearn, TAFE, Western Sydney

Runners Up:

Gabby Elias, All Saints, Bathurst

Madeleine Medak, Colo High, North Richmond

Giles Ditchfield, CB Alexander Ag College, Tocal

Hamish Fuller, Saint Ignatius' College - Riverview, Lane Cove

The award is open to students and cadets between the ages of 16 and 25, who are studying agriculture or a similar subject, involved in the grazing industry and reside within 200 kilometres of Sydney.

Congratulations once again to Brendan and all the place getters for this award.

Mount Annan Christian College

2014 has been quite an eventful year for the MACC Ag students. We began the year with Stage 1 of our new undercover learning area being completed. Shelter from the sun and rain and an excellent place to shear our animals, it has already been well utilised. Our thanks goes out to the Ride to Cure Cancer Team for providing the expertise and labour for the project.



Our participation in the Camden Show and the Royal Easter Show were two big events on our calendar this semester. The students, with the assistance of Jemalong Wool, developed a sophisticated Field to Fashion display in the education tent at the Camden Show. They particularly enjoyed learning to knit and crochet. This year we fielded at team in the Junior Judging Competition, where they judged meat sheep, merino wool, chickens and eggs. They didn't win however; the lessons were valuable and the team, Caragh Heringe, Emily Willard, Emily Wood and Elisha Lester went on to select our three laying hens that took out second place at the Royal Easter Show School Egg Laying Completion. Fifty schools across NSW took part in this competition.



The Cattle Team at the Camden Show realised that even in teaming rain that the show and the work must go on. Our Cattle Team represented the College at the Royal Easter Show working with Werombi Vale Ayrshire Stud. The team, Samara Rutten, Daniel Wearden, Mark Davis and Joshua Stevenson, put in six

solid days of milking, feeding, watering, cleaning and parading 16 heifers and cows. They did an amazing job and were rewarded third place in the shed for Team of Herdsman (clean, organised display). This is a golden opportunity afforded to us by Brett and Melinda Hayter.

At the beginning of Term 3 our Year 9 class will be participating in the Cows Create Careers competition. Year 9 will be responsible for the daily welfare of two calves. They compete against other schools in producing a marketing presentation.

Year 11 students are establishing a Lavender crop so keep your eye out for further development of that enterprise.

Mrs Caines
Agriculture Teacher



Picton High School

The Primary Industries and Ag kiddies have been very busy at Picton High over the term. The PI team went out to a property to construct a fence and did three full days at the property. We have had success at Holbrook Sheep and Wool Fair (most successful exhibitor- black and coloured sheep section), Robertson Show, Yass Show and Hawkesbury Show.



Year 10 Ag were involved in the Australian Pork unit trial. The kids really enjoyed participating in the trial and were filmed for a video to be displayed at the Australia Pork Conference in QLD. We have also had some sponsorship from Glencore, they have kindly fixed our sheep trailer, covered it and added a jockey wheel.



We are also involved in the UniSchools University Steer Challenge. Our little Hereford steer is growing well. The kids had a great day at the training day, they especially liked the meat science work shop.

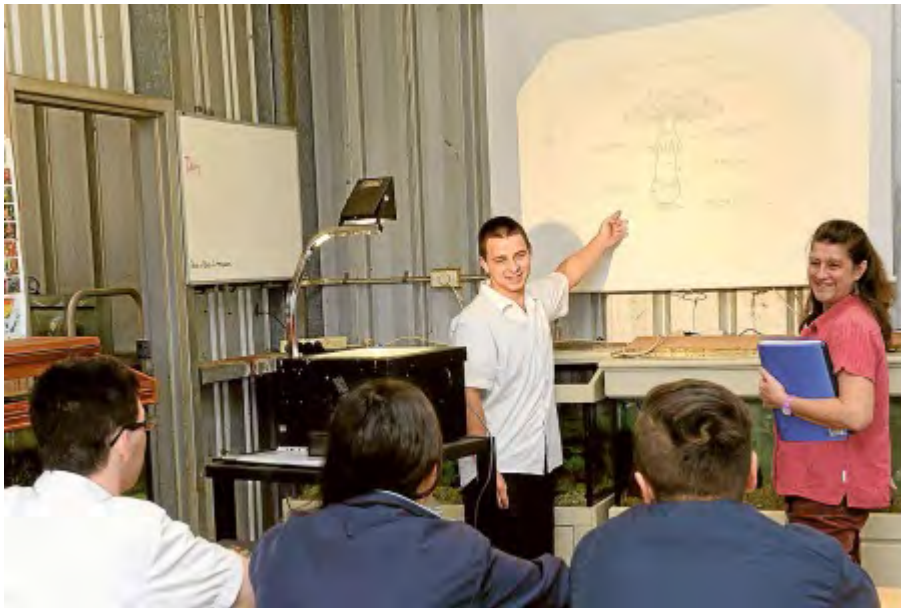
I also have three students going to The Australian Agricultural Longreach campus in the September holidays for their TASTE program. We will be fundraising, using a local dairy's milk products, Country Valley Milk, to make milkshakes to sell to students.

Hayley Mahoney



City Teens defy Ag Statistic

by NICK HEYDON
The Land Newspaper



Crestwood High School agriculture teacher Robbie Ashhurst (right) and Year 11 student Lachlan O'Brien during a class.

AGRICULTURE student Lillie Ackley is not at all surprised by survey results showing 77 per cent of city-based teenagers know either little or nothing about farming.

“They don’t know about the industry,” said the Year 11 student from Crestwood High School in Sydney’s Baulkham Hills.

“It is really important to know about agriculture – it is important people know where their food is coming from,” she said.

Lillie has been studying agriculture since Year 8, and is doing an animal studies course at Richmond TAFE.

She is passionate about her agriculture education and loves working with livestock, but the high school student from north-western Sydney is in the minority when it comes to an understanding of farming, according to recently released survey results from Rabobank.

Aside from showing 77pc of city teenagers had little or no knowledge of food production, the Rabobank Farm Experience Urban Youth Research survey of 600, 15 to 18 year-old high school students from Australian capital cities also revealed 68pc had little or no knowledge about how food goes from the farm through to the plate.

Other figures showed 50pc have only set foot on a farm three or fewer times in their life, while 17pc of those surveyed have never been on a farm.

Rabobank sustainable business development head Marc Oostdijk, Sydney, said some of the survey results confirmed assumptions of a knowledge gap of farming for urban high school students.

“There is a high level of urbanisation in Australia, with about 65pc of the total population living in the five big cities, so there is quite a big urban-rural divide, but one of the things that connects the two is food and fibre production,” Mr Oostdijk said.

“Yet the level of knowledge of food production in the city – and the understanding of how it is grown – is low.”

The results from the survey were not all negative.

"What was surprising though was the high amount of positive associations with the food and fibre industry, and how important youth think farming is to Australia," he said.

The survey found an overwhelming 93pc had positive associations with farming, highlighting the contribution of agriculture to the economy.

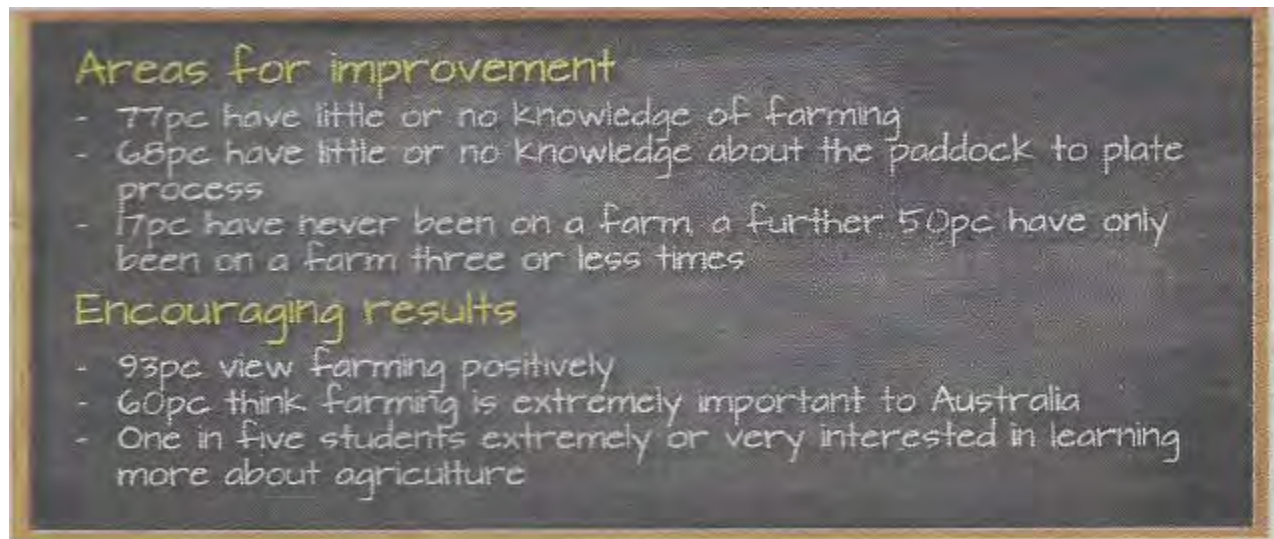
And 60pc considered farming to be extremely important in Australia.

There then is a missing link between the positive views of agriculture and the actual knowledge of agriculture, Mr Oostdijk said.

He said it was important to improve the promotion of career prospects in agriculture to urban students, highlighting exciting areas such as technological developments in the industry.

There is positivity on the ground, believes Crestwood High School's agriculture teacher Robbie Ashurst, who said many students were extremely interested in agriculture and were having good discussions about the future of agriculture.

NSW Education Minister Adrian Piccoli said some of the survey results were concerning.



What Do Sydney School Students Know About Ag?

"A lot of people don't know where their food is grown; their food may be from overseas but they will just buy it because it is cheap."

- Lillie Ackley, Year 11, Crestwood High School

"Some kids don't know much about agriculture, but farming has an important future - if we didn't have agriculture then we wouldn't survive."

- James Hooke, Year 11, Crestwood High School

"I think some students have considered studying agriculture but haven't followed it through, but I think it is a really important subject as we need to know how to feed people."

- Kayla Russell, Year 11, Crestwood High School

"Some people don't care about it, but it is important they know where their food comes from - if we didn't have agriculture in Australia we wouldn't be a major player in the world."

- Riley Rolhoff, Year 10, Oakhill College

"I enjoy being involved on the show team, especially as we are in an area where there isn't much farming around and so it is something you can dip your toes into."

- Myles Lauer, Year 7, Oakhill College

"I think agriculture plays a massive role in Australia, as without agriculture we wouldn't have a lot of things and we would have to import more from other countries. It is important to understand agriculture so we know about what resources we need to survive."

- Andrew Scarsbrook, Year 7, Oakhill College

Retirement of Ivan Gant?

Hi All

For all the people who know me, Friday 8th November will be my last day working for the department.

I joined the Department in 1978, starting at Canowindra High School. Most of my teaching career has been spent at Merriwa Central School, teaching agriculture and science in the earlier years. Then as VET HT teaching Agriculture, PI and IT.

In 1994, I ventured into some out of school work with DEC around connected classroom technology. Then in 1997 moved out of home through the week to work in VET consultancy in Newcastle. During these latter years like so many consultants; I have been through new waves of centralisation & de-centralisation – dressed up every time in new ‘sheep’s clothing.’ I have been given great policy initiatives to implement, I have had lousy ones to implement, as well. What this has taught me is that despite whatever flavour of crap we are being fed – people out there still need help & assistance.

The best thing I have enjoyed in my time in the Department, is the opportunity to work with (& get to know) some really capable, common sense people; with a great ‘can do’ attitude. Especially those from this group NSWAAAT. The last few years of work even though they were based away from home were part-time, which allowed me to work a bit more at home on the farm and spend a little more time with my wife. This year I went back to full-time teaching, once again living away from home; it is this situation, which has led me to the decision to retire and take a different tack. The plan is to spend more time on the farm and do some teaching from the beginning of 2014. I may pick up some work locally, but if any of you want to take some time off and need someone to fill in for Ag or PI I am keen to oblige, if I am available with a few conditions a month or two would be fine.

I will miss a lot of you people. I will miss the interaction, the humour & the camaraderie.

I wish you all well for the future.

Regards,

Ivan Gant

Not long after retiring Ivan was back at work. He is now a Senior Pathways Advisor for NSW Public Schools based in Tamworth.

His contact details are:

Tel: 02 6755 5047

Fax: 02 6755 5020

Mob: 0447 391 357

Email: ivan.gant@det.nsw.edu.au

155-157 Marius St, Tamworth NSW 2340

Farm assistants

What do Farm Assistants do in schools?

Secondary and Central schools that offer Agriculture on their curriculum and have an established agricultural plot may be allocated a part time (two or three days per week) farm assistant position.

The Farm Assistant's role varies from school to school, depending on subjects offered and school resources. Several of our high schools and central schools offer courses in agriculture, primary industries and horticulture. Some of our high schools and central schools also offer extra-curricular activities such as livestock showing.

A farm assistant's duties may include:

- preparing and maintaining the agricultural area
- crop production and disposal
- machinery operation
- maintenance of machinery, tools and equipment
- care of livestock
- receipt and storage of supplies
- general farm maintenance.

How are jobs filled?

Many of these jobs are advertised on the DEC job search site. Schools welcome your application. Use our the school locator to find a school that may suit you and either contact them directly to enquire about vacancies or check for advertised permanent vacancies on www.jobs.nsw

Current Farm Assistants may be eligible to apply for transfer.

Upcoming Agricultural Events

Shows

Date	Location	Date	Location
22 - 23 August	Condobolin	28 September	Lockhart
23 August	Ganmain	2 - 3 October	Wagga Wagga
25 - 27 August	Parkes	4 October	Culcairn
29 - 30 August	Grenfell	4 October	Bribbaree
29 - 30 August	Narromine	5 October	Berrigan
30 August	Lake Cargelligo	5 - 6 October	Griffith
30 August	Barellan	6 October	Morongla
30 - 31 August	Penrith	6 October	Walbundrie
30 - 31 August	Wentworth	10 - 11 October	Leeton
2 - 3 September	West Wyalong	11 October	Illabo
5 - 6 September	Forbes	11 October	Casino
5 - 6 September	Murrumburrah - Harden	11 - 12 October	Taree
6 September	Narrandera	11 October	Trunkey Creek
6 September	Manildra	11 - 12 October	Picton
6 - 7 September	Barmedman	12 October	Corowa
6 September	Campbelltown	13 October	Norfolk Island
7 September	Woodstock	16 - 18 October	Lismore
7 September	Finley	17 - 18 October	Barham - Koondrook
9 - 10 September	Cowra	18 October	Cootamundra
12 - 13 September	Eugowra	18 October	The Rock
13 - 14 September	Hay	18 October	Tooraweenah
13 - 14 September	Quirindi	24 - 25 October	Alstonville
13 September	Ungarie	25 October	Carcoar
14 September	Cudal	25 October	Junee
14 September	Ariah Park	31 October - 1 November	Murwillumbah
19 - 21 September	Merriwa	31 October - 2 November	Albury
20 - 21 September	Nimbin	1 - 2 November	French's Forest
20 September	Ardlethan	8 November	Holbrook
21 September	Molong	8 - 9 November	Mullumbimby
21 - 23 September	Young	8 - 9 November	Queanbeyan
26 - 28 September	Singleton	8 November	Neville
26 - 27 September	Kyogle	9 November	Minto
26 - 27 September	Canowindra	14 - 15 November	Bangalow
27 September	Hillston	14 - 15 November	Bulahdelah
27 September	Temora	22 - 23 November	Dorrigo

Field Days

19 - 21 August 2014	Ag Quip	Gunnedah
5 - 6 September 2014	Berry Small Farm Field Day	Berry
23 - 25 September 2014	Henty Machinery Field Days	Henty
18 - 19 October 2014	Murrumbateman Field Days	Murrumbateman
24 - 26 October 2014	Australian National Field Days	Orange
1 - 3 May 2015	Total Field Days	Paterson

Snippets

The Country Education Foundation produces a quarterly newsletter. To read and subscribe go to:

<https://cef.org.au/newsletters/>

Meat and Livestock Australia has a number of newsletters available to non-members. They include:

- **Meat and Livestock Weekly**- a weekly eNewsletter providing the latest news, analysis and trends for domestic and export markets, including information on buyer and competitor activity and trends.
- **More Beef from Pastures** - a quarterly eNewsletter designed to keep you up-to-date with the latest developments in the MLA More Beef from Pastures program.
- **Making More From Sheep** - a regular email update on Making More From Sheep activities and updates to the manual (to subscribe to this eNewsletter visit the website <http://www.makingmorefromsheep.com.au/EmailUpdates/emailupdatesindex.htm>)
- **Goats on the Move** - a quarterly eNewsletter providing information on the latest developments in MLA's goat program and the broader Australian goatmeat industry.

You can find links to these at: <http://www.mla.com.au/News-and-resources/eNewsletters>

The Poultry CRC have released a wonderful animated video on the 21 day development of a chick embryo. Watch it at: <http://www.poultryhub.org/embryo/>

Total College run a range of PROfarm training courses at various locations throughout the state. To see their upcoming calendar of courses and venues go to:

http://www.dpi.nsw.gov.au/agriculture/profarm/profarm_course_calendar

Sheep CRC provide a subscription newsletter by email. Register on their homepage:

<http://www.sheepcrc.org.au/> You can view the archived newsletters by going to:
<http://www.sheepcrc.org.au/information/newsletters.php>

Rural Skills Australia

Subscribe to their regular newsletters, and read those archived at:

<http://www.ruralskills.com.au/newsletters/>

The April 2014 edition contains a Rural Career Guide.

The Warren Centre for Advanced Engineering.

<http://thewarrencentre.org.au/digital-farms/>

TOCAL College open days

Prospective students and their families are invited to visit the College during the school holidays. The Open days are designed to allow you to find out more about College life, the courses and to meet the College staff.

2014 Open Days: Friday 26 September and Friday 3 October

General program for the day

- 10.00am - morning tea
- 10.30am - talk on courses and employment opportunities
- 12.00pm - lunch available (\$10.00), please book
- 1.00pm - tour of college farms
- 2.30-3.00pm - conclusion

For more information and to make bookings for lunch please contact us on 1800 025 520 or 02 4939 8888, or email info@tocal.com

HSC Study Guide 2014 – Agriculture

(from the Sydney Morning Herald's Education Section - June 13, 2014)

by Owen Thomson



Grow your knowledge: Supplement course work with media resources for top marks in the Agriculture exam. *Photo: 123RF.com*

Stay up to date with developments in the agricultural sector, writes Owen Thomson.

A detailed multi-step study program could well be the key to reaping a bountiful marks harvest in this year's HSC agriculture exam.

Carl Chirgwin, senior agriculture teacher at Griffith High School and president of the NSW Agriculture Teachers' Association, says students must first ensure that their notes are divided into clear and distinct themes.

"Notes on animals should be divided into areas such as digestion, reproduction and behavioural paths," he says. "Once they do that, they'll be able to practise past papers more effectively."

Chirgwin then recommends that students attempt a practice paper with the aid of any information resources they wish before submitting it to their teacher for appraisal.

"Take it back and study it, then get the exact same paper again and do it without any assistance, and do it in the timeframe that's allocated," he urges. "Do it without any distractions - no phones, no parents, none of that."

Chirgwin also strongly recommends supplementing classwork with additional information from industry specific media such as *Landline*, *The Land*, *Farming Ahead* magazine, as well as other internet resources.

"The HSC paper is set mid-way through the year and it draws upon current agricultural issues," he says. "For example, a couple of years ago the Murray-Darling Basin was a big news topic and the basis for one of the questions. So students need to keep up to date with what's happening. What's going on with our cattle? What are we exporting to Asia? Also, what technologies, like yield mapping or fertiliser mapping, are farmers and producers currently using? These types of things are very important."

Sample question - Agriculture (6 marks)

Plant breeding systems have developed to incorporate new genetic techniques aimed at improving plant quality and production. Discuss the implication of this development on Australian agricultural systems.

THE EXAM – Agriculture

Section I - Core

Part A: Objective response questions (20 marks)

Part B: Short-answer questions (60 marks)

Section II – Electives

Part A: Short-answer questions (8 marks).

Part B: Extended response question (12 marks)

For more information visit the BOSTES website: www.boardofstudies.nsw.edu.au

CATTLE WONDERWORD

ANGUS
BELMONT RED
BRANGUS
CHAROLAIS
HEREFORD
ILLAWARRA
LIMOUSIN
RANDALL
SIMMENTAL

AUSSIE RED
BRAFOR
BROWN SWISS
DEVON
HIGHLAND
JERSEY
LONGHORN
SANTA GERTRUDIS
WAGYU

AYRSHIRE
BRAHMAN
CHARBRAY
GUERNSEY
HOLSTEIN FRIESIAN
KERRY
MURRAY GREY
SHORTHORN
ZEBU

H	D	Y	N	S	U	G	N	A	S	C	M	Q	S	S	K
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U	Y	G	A	W	O	D	E	R	E	I	S	S	U	A	N

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<http://puzzlemaker.discoveryeducation.com/WordSearchSetupForm.asp>



