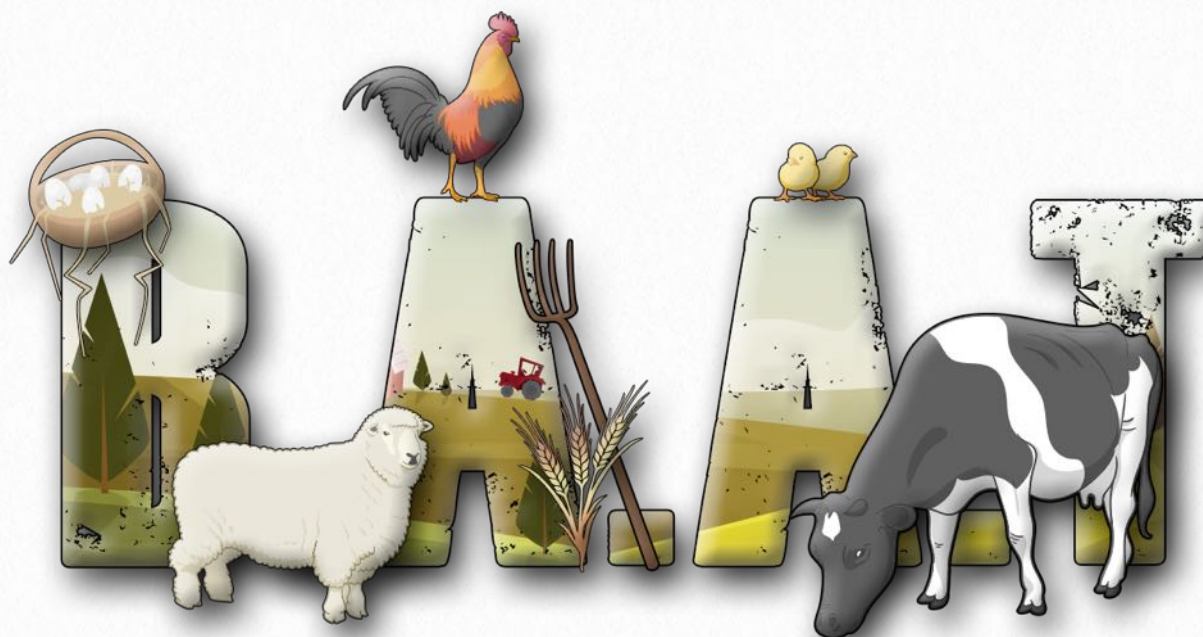


Winter Edition – No. 55, 2017.



Bulletin of the NSW Association of Agriculture Teachers



Chifley College, Bidwill Campus prepare for Mothers Day Stall

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N.S.W. Association of Agriculture Teachers Inc

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Meet Vice President Jennifer Caines

To new teachers..... The opportunity we have to put legs on the learning of all other KLAs is amazing. The extra time we invest in our program eg animal welfare, shows and extra-curricular competitions is worth it for us as teachers and members of the Agricultural community and the young people we work with.



Teaching since..... 2006

Previous Careers..... I started in retail, then a Pre-school assistant, wool classer, mother and worked in rural retail

Schools..... 1 year at Hurlstone Agricultural High School; Teaching Geography, History, Business Studies and Commerce. Started teaching at Mt Annan Christian College in 2007 and teach Ag, Geography and STEM-Ed.

Hobbies.... They used to be horse riding and water skiing but now it is being a pillion on a motorbike, travelling and reading.

Meet Secretary

Angela Colliver

Angela Colliver is widely experienced in the development and delivery of nationally distributed educational content, programs and associated curriculum materials in primary industries education and education for sustainability in both the private and public sectors.

Angela has a Bachelor of Arts and Graduate Diploma of Education, lives in Wamboin in NSW on 10 acres and grows 4 varieties of garlic that is sold to a local IGA.

Angela is also a member of the SA and QLD Agriculture Teacher Associations, the treasurer of the Australian Association for Environmental education and the co-editor of the Social and Citizenship Education Association Australia's journal the 'Social Educator'.

Angela's interest in Agriculture was initiated when she owned a vermiculture business 'Worms R Us', and from growing food sustainably. Her research and writing in the subject area began at CSIRO as she developed classroom resources about 'Agriculture in a Changing Climate' and when PIEFA requested that she develop the 'Agriculture in the Classroom' resources in 2013-14.

From here she has developed the 'Discover Dairy' units of inquiry and learning sequences and a range of video support is available at <http://www.dairy.edu.au/DiscoverDairy> Australian Pork Limited's Educational resources have also been developed by Angela as have many more.

If you are interested in red meat processing, these were launched at the Royal Easter Show.



From Paddock to Plate Digital Interactive

This is a digital interactive animated resource showing the paddock to plate supply chain, beginning with how cattle, sheep and goats are farmed and ending with how these different cuts of red meat products can be cooked and prepared for eating. It has sixteen pop ups each with a heading, an image, informational text, audio and five have video footage. The topics include the how red meat gets from cows, sheep and goats to you; production numbers; people in the red meat industry; how red meat is farmed; how cattle, sheep and goats are transported from farms to abattoirs; how red meat is processed; how milk is transported from processing plants to wholesalers, restaurants and supermarkets; research and quality assurance processes and their purposes; how red meat is prepared for eating; types of red meat products and different cuts of red meat that can be produced from cattle, sheep and goats; how to prepare and make a beef burger; how to prepare and make a lamb wrap and how to prepare and make a goat backstrap salad.

Year 5/6 Unit of Work 'From Paddock to Plate'

This is a teacher resource containing a sequence of inquiry about how and why red meat is processed and packaged in managed environments and prepared to enable people to grow and be healthy. It includes six Project-Based Learning inquiry sequences to develop understandings about the numerous activities Australian red meat processors use to process cattle, sheep and goats into red meat products that are suitable for sale. It also explores labelling solutions for the red meat processing industry. This resource also includes teacher notes, links to additional supporting information, images, videos, a digital interactive and student project files designed for learners.

Years 7/8 Unit of Work 'Meat Matters! We All Have a Steak in this'

This is a teacher resource containing a sequence of inquiry about the sustainable resource management practices used by the Australian Red Meat Processing industry. It includes six Project-Based Learning inquiry sequences to develop understandings about the ways processors use and manage water, waste and energy sustainably. This resource also includes teacher notes, links to additional supporting information, images, videos, and student project files designed for learners.

Years 9/10 Unit of Work 'Australian Meat Processing'

This is a teacher resource containing a sequence of inquiry about the processing, production and marketing of Australian red meat. It includes six Project-Based Learning inquiry sequences to develop understanding about the high-tech robotics and automated systems within plants and enable exploration of marketing practices used by the industry. This resource also includes teacher notes, links to additional supporting information, images, videos and student project files designed for learners.

Feel free to contact Angela.

Email: angela@colliver.com.au

Address: 84 Merino Vale Drive WAMBOIN NSW 2620

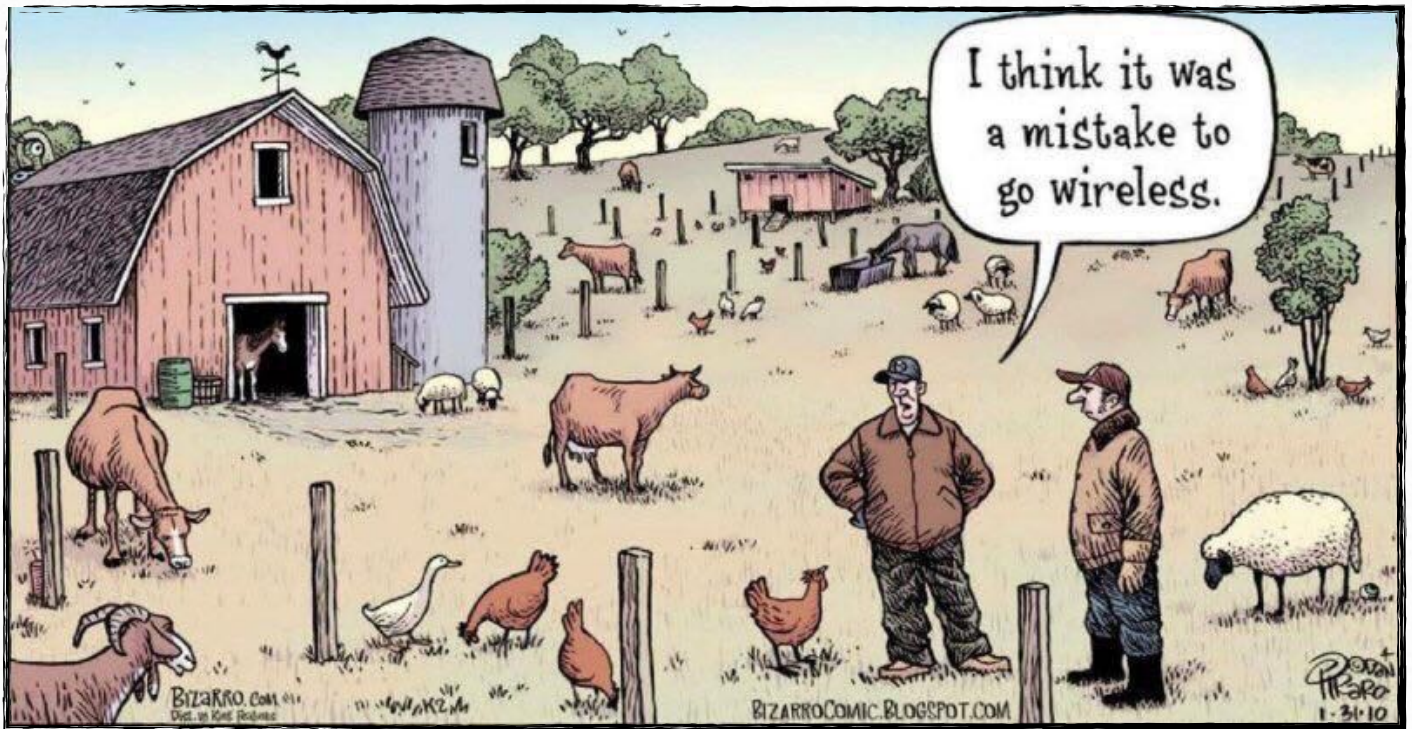
Mobile: 0407 377 923

Skype: merinovale84

The best teachers teach from the heart not from the book.
Author Unknown

2

Reports



Please send network meeting summaries to baat.editor@gmail.com



Presidents Report

Luciano Mesiti

Prez Chat

Welcome to our second BAAT for 2017! I hope the winter has started well for you.

There has been a change to our executive since we last chatted. Carl Chirgwin has stepped down as Secretary. I would like to formally thank Carl for his commitment and passion for agricultural education and his vast contribution to our association in the years he has held an executive position. In his place, we are fortunate to have Angela Colliver, who is an education consultant developing and delivering curriculum programs and materials to primary industries and environmental education. Please welcome Angela to our association and we look forward to working with her. More information about Angela will be found in this edition of BAAT.

The hot topic of the moment is the new biosecurity regulations coming into place on 1 October. Many of you might have heard about this addition to our Ag plot management. This edition of BAAT contains information to assist you in planning for this change. In many ways this forms part of the farm management already expected by our respective school systems. It's also a good opportunity to use this in our animal production curriculum.

Planning is underway for the National Association of Agriculture Educators conference in January next year. We are organizing for the conference to be accredited by the PTC, so more news on this will be forthcoming. Also, the PIEFA conference in April next year will be accredited; again more information will be forthcoming.

The re-designed NSWAAAT website is currently being worked on and soon a new web interface will be born. Many of you have websites that you use that could provide excellent resources and lessons to teachers. I ask you to share these with me so we can add them to the website. Please email me anything you would like added to the website. When the site is in a draft form, we will ask you for feedback.

One issue that is becoming a critical concern to us as an association is the declining number of trainee teachers who are choosing agriculture as their method subject at University. There seems to be little incentive or advertisement to prospective trainee teachers that agriculture is a worthwhile teaching pathway. I have started a discussion with a number of industry organizations regarding this and I will be communicating this issue to ministers to see what state and federal departments can do to provide incentives.

Have a great mid year break!

Luciano



Tomatoes grown in
WSU new
Greenhouse Facility.
See page 31 for story



Sydney Branch of NSWAAAT Report



The Sydney Branch Meeting for term 2 was hosted by [Pittwater High School](#), this school is unique as it is situated in a completely urban area, and is close to the ocean in both locality and by the tidal water table just under the sandy soil.

There were 20 teachers who attended, some of whom had driven diagonally through Sydney during the busy afternoon traffic to be there.

Paul Cannings and Lara Griffin showed the 20 teachers the facilities of their compact but well equipped School farm, and considerable time was spent looking at several types of working aquaponic systems. Silver Perch, Trout and Koi are kept, and a wide variety of vegetables and herbs were being produced in the growing beds.

The aim of the school is to teach 'urban' agriculture, and demonstrate to the students and the community methods of producing food sustainably in small areas. The school vegetable plot was a good example of the concepts being brought to fruition by the efforts of the students and staff.

After the tour we were given a comprehensive presentation on aquaponics which could be used in urban areas and small city spaces like rooftops.

Once again the Sydney Branch members benefited from a look at the facilities of another school and from the skills and enthusiasm of other teachers. The support of teachers in the region is such that we have host schools for our quarterly meetings booked up well into next year. We look forward to our next meeting in term 3.

David Randall (Former Agriculture Teacher, Richmond High School)



NSWAAT Awards

CITATION

NOMINEE: **ARTHUR KELLY**

AWARD: **J.A. SUTHERLAND AWARD**

Dear Ladies and Gentlemen of the NSWAAT,

I wish to nominate **Arthur Kelly** (ex-Camden High School) for the **2017 JAS Award**. Below is a snapshot of some of the work that Arthur has been involved in over a long and stellar career as one of the leading teachers of agriculture in NSW during the past 4 decades.

Arthur spent the majority of his teaching career (29 years) as a classroom teacher at Camden High School after an 8 year initiation at Galston HS. . Whilst a valued and competent employee of the DEC, Arthur elected to remain in the classroom where he could make a difference to students' lives rather than opt for promotional positions, despite being a most competent and well respected member of the Camden HS staff.

Arthur has been heavily involved in local and state ag-education issues during his teaching career as a member of the NSWAAT and Sydney Branch AAT since 1976 (ie approximately 40 years). As Treasurer of both organisations for approximately 5 years in the late 70's – early 80's, Arthur was involved in many agricultural activities, often presenting valuable practical sessions at in-service courses as well as being a regular contributor to BAAT.

Arthur has been involved in writing a variety of support documents for both the junior and senior syllabi during his teaching career, as he was always well respected by the BOS as a knowledgeable and reliable source from the “coal-face”.

Arthur was also an integral cog in the HSC marking process where he was involved as either a marker or Senior Marker since the late 1980's, often overseeing the marking of the 3-Unit projects during the period when they were included in the syllabus.

Never one to lay idle, since his retirement from Camden HS in 2012, Arthur continues to be involved in agricultural education, being appointed to the position of Chief Examiner of the HSC Agriculture 2 Unit paper in 2012, a position he has held ever since. The very positive feedback received from Ag teachers regarding the HSC exams since Arthur's involvement is testament to his thoughtful and insightful approach to providing the students of NSW with a fair but testing exam.

Arthur has also been working with Sally Bannerman on a variety of educational programmes in recent times, including the production of agricultural resources such as Poultry in Schools, robotic dairy technology, plant breeding and Reptiles in Schools video productions.

Additionally, Arthur has been requested to review and update a number of HSC online activities, has mentored a number of beginning agriculture teachers and is a knowledgeable resource for anyone requiring assistance.

When he does eventually disappear from the ag-education scene he will be sorely missed as he has been a very valuable asset to public education in NSW for a long time. I feel this award would be fitting recognition for all the work Arthur has unselfishly but efficiently performed for teachers throughout the state for many years. He is an individual who doesn't seek praise for his efforts, he simply gets in and does it.

Arthur has been an outstanding agriculture teacher for almost 40 years and his legacies to agricultural education will be of great assistance to all Ag teachers for years to come. I therefore have no hesitation in nominating Arthur for this prestigious award.

Grant Jackson
Gosford HS
Agriculture SoM (Sydney)
President Central Coast AAT

seconded by: Sheryl Thornthwaite
Galston HS
ex Agriculture SoM (Sydney)



Justin Connors and Arthur Kelly

CITATION

NOMINEE: GRAHAM QUINTAL

AWARD: LIFE MEMBERSHIP

Graham received his Agricultural training at Wagga Agricultural College (CSU) and teacher qualifications at Armidale Teachers College. His first appointment was to Nyngan High School in 1974 as a Support Teacher, but by June a vacancy arose at Mudgee High School where he was to spend the next 15½ years. In the latter part of this time he supported a number of new teachers and established a small Ag Plot on the school grounds, to complement the larger farm some 2km away. During his time at Mudgee, Graham provided a number of teaching resources to BAAT.

In 1990 -1992 he was appointed Western Region Computer Education Consultant, and from 1993 -1995 was successful in being appointed as the Western Region Environmental Education Consultant - providing support for students and teachers in the entire region through workshops, in-service courses and 1-on-1 training.

In 1996 - 1998 he changed employment and joined the Department of Land and Water Conservation as the NSW Landcare Education Officer providing support state-wide to Ag, Science and Geography teachers in a range of Landcare programs and activities that they could involve themselves in. During this time he re-modelled a number Agency education resources to simplify activities for primary schools.

Appointed to Pennant Hills High School in 1999 he worked tirelessly to improve the Agricultural facilities at the school and successfully enhanced student candidature for the subject. A legacy of his work has been the development of the school farm during his time at the school.

From 1996 -2010 he worked on a number of resources and workshops for BOS, as well as some advice to the Agricultural curriculum committee. From 2002 he marked HSC Agriculture papers for 9 years for an enormous enhancement in his professional learning.



Carl Chirgwin and Graham Quintal

Since retiring at the end of 2010 he has been BAAT editor through 2013-14 and from late 2015 to early 2017; as well as Treasurer from September 2014 to the present time. He was an active member of the committee which oversaw the very successful 2017 NSWAAAT Biennial Conference.

I commend Graham as a worthy recipient of Life Membership

Justin Connors
President, NSWAAAT

3 RESOURCES

Sydney Morning Herald Agriculture HSC Study Guide 2017

Agriculture is about the management of resources in a sustainable manner for the production of food and fibre; the marketing of these products to an ever growing world population and the use of the ever evolving technology to improve efficiency of production and marketing. The syllabus is very flexible, allowing students to study different plants and animals, and the strategies on how to best produce them. Students are encouraged to study enterprises to which they will have access in order to gain a better understanding of them.

Students should have a thorough understanding of the agricultural product(s) they have studied and be able to adapt that knowledge to the questions posed in the examination. Practicing on past exam papers will provide the student with a better understanding of the style of questions posed by the examiner. Read the question carefully and ensure you provide a response to all aspects required in the question.

Understanding the key terms of enquiry used in all HSC examination papers, is essential to gaining the best possible marks. (NESA Glossary of Key Words).

Quite often, questions will require the use of several explanations and/or illustrative examples in order to gain maximum marks, eg. If the question states 'evaluate marketing strategies', then ensure you evaluate at least 2 strategies. NESA provides access to the marking guidelines, along with sample answers, of past HSC papers.

These will guide you in the development of a better answering style. (These are available for download at [here](#))

[NSW Independent Trial Exams](#) produce HSC style examination papers which can also provide valuable practice.

Be sure to understand the examples you studied, including your farm case study and farm product study, and adapt them to particular questions.

- Understand your experimental design principles for both plants and animals you have studied. Be critical in your response: understand how to design and report on a fair and effective experiment.
- The Elective is a substantial part of the examination, ensure you cover all the syllabus dot-points in detail with respect to the technology focus.

Develop good study practices; make summary notes, answer examination-style questions, work with classmates and discuss aspects of the entire course. Be strict in your study program, maintain motivation and devote the required time to aspects of your course where it is needed most.

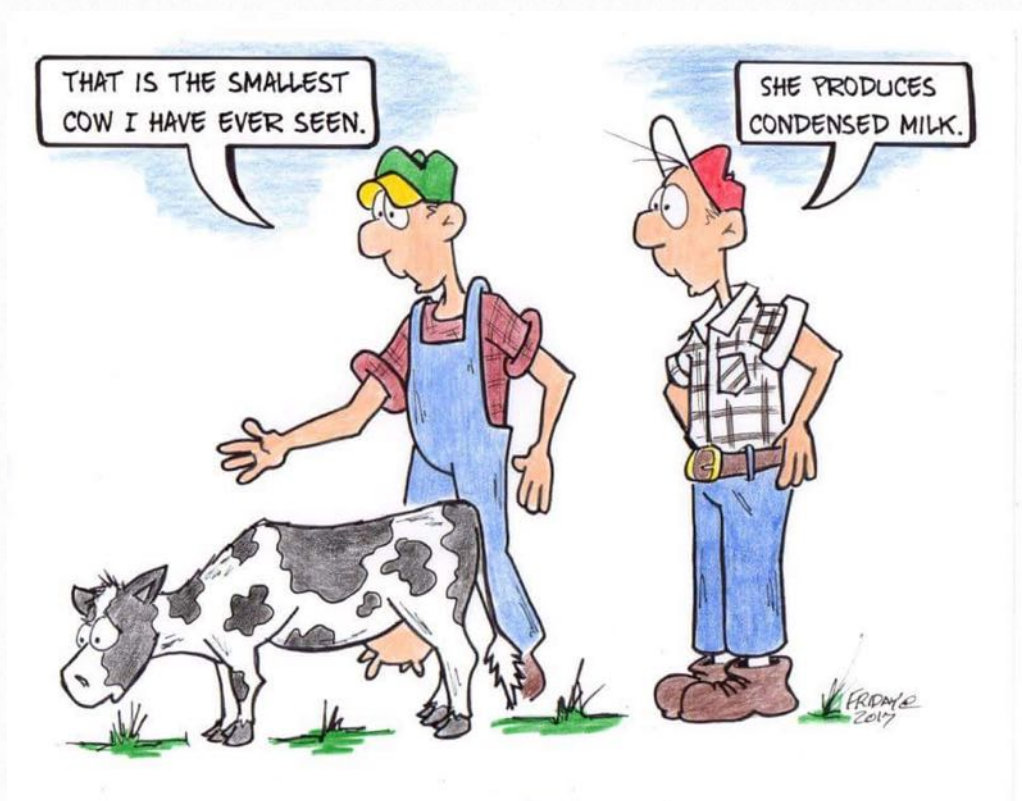
See NESA for more about the HSC and Agriculture, and Students Online for more study resources and exam advice.

Luciano Mesiti

Colo High School

Graham Quintal

NSW Association of Agriculture Teachers



Resource for Steggles Meat Bird Competition from Xavier College

Xavier College Agriculture students entered this year's Steggles Meat Birds Pairs competition at the Sydney Royal Easter Show. Our Ag Club students had spent six weeks caring for, feeding and cleaning up after 14 baby chickens that were being raised as meat birds for human consumption. These birds grow at an astounding rate, gaining a massive 2.5 to 3kg over the six week period. Xavier College took out second place in both the Meat Birds Male Live Class and the Meat Birds Male Carcase Class. Well done to the students on their hard work. The Ag Club students put together a website to highlight all the things they learnt about the Meat Bird Industry during the first term of the year.

Danielle Alexander and Justine Phillips (Agriculture Teachers, Xavier College)



Macintyre High School Cattle Resources

C



Student Name: _____

Cattle classing

Use the A3 animal identification page to complete the following.

Cow Number	Breed possibilities	Possible target market	Muscle score
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			



Student Name: _____

Preparing Livestock for Competition



Activity

2017 EKKA and others





Part of preparing for shows (as well as the fun breaking in part) is working out weight gain, class entries needed etc. Here is what we need to do with carcass stock for deciding which shows to attend.

I need your help with:

- 1 Working out weight gain/day
- 2 Working out show class suited to and type of market for beef – butcher, supermarket or export
- 3 Enter the animal in a class for EKKA
- 4 Do costings/budgets

Name	Sex	Days	Initial Weight on 04/03/2017	Current Weight on 18/5/2017	Weight Gain Current - initial	Growth rate = Weight gain/ days
Kevin 	Steer	108	293 (31/1/17)	425	$425 - 293 = 132$	1.2kg/day (132 divided by 108 equals 1.2)
Houdini 	Steer	54	334	424		

Bodacious 	Steer	13	430	438		
Name	Sex	Days	Initial Weight on 04/03/2017	Current Weight on 18/5/2017	Weight Gain Current - initial	Growth rate = Weight gain/ days
Malbec 	Steer	54	309	380		
Black Betty 	Steer	54	211	252		
Veg 	Steer	54	195	274		
Duke 	Steer	54	345	397		
Boris 	Steer	54	298	377		

Yak Attack 	Steer	54	307	363		
Marto 	Steer	54	404	477		
Name	Sex	Days	Initial Weight on 04/03/2017	Current Weight on 18/5/2017	Weight Gain Current - initial	Growth rate = Weight gain/ days
Poddy 	Heifer	51	296	335		
Kingy 	Steer	20	361	360		

Using this information, project what they will weigh at EKKA in 80 days' time.

Name	Weight gain (from prior page)	At EKKA = Initial gain x 80 plus current	Weight gain est wt	Class suitability (could be >/ suited)
Kevin	1.2	$1.2 \times 80 = 96$	$96 + 425 = 521$	
Houdini				
Bodacious				
Malbec				
Black Betty				
Veg				
Duke				
Boris				
Yak Attack				
Marto				
Poddy				
Kingy				

EKKA classes are as follows:

School Steer/Heifer (kg)

Class 13 Heifer	325 – 400
Class 14 Heifer	401 – 460
Class 16 Steer	375 – 400
Class 17 Steer	401 – 445
Class 18 Steer	446 – 490

Domestic Market Specifications

P8 (rump)fat	3 – 16mm	optimum 8 – 9mm
Rib fat	3 – 12 mm	optimum 6 – 7mm

Open Steer Classes

Hoof

Light weights

Class 1	325 – 350
Class 2	351 – 375
Class 3	376 – 400

Medium weights

Class 4	401 – 430
Class 5	431 – 460
Class 6	461 – 490

Heavy weights

Class 7	491 – 540
Class 8	541 – 590
Class 9	591 – 650

suits ⇒

suits ⇒

Hook

Supermarkets/restaurant market

P8 site	3 – 16mm	optimum 10 – 11mm
Rib	3 – 12mm	optimum 7 – 8mm

Export market

P8 site	6 – 27mm	optimum 11 – 12mm
Rib	5 – 20mm	optimum 9 – 10mm

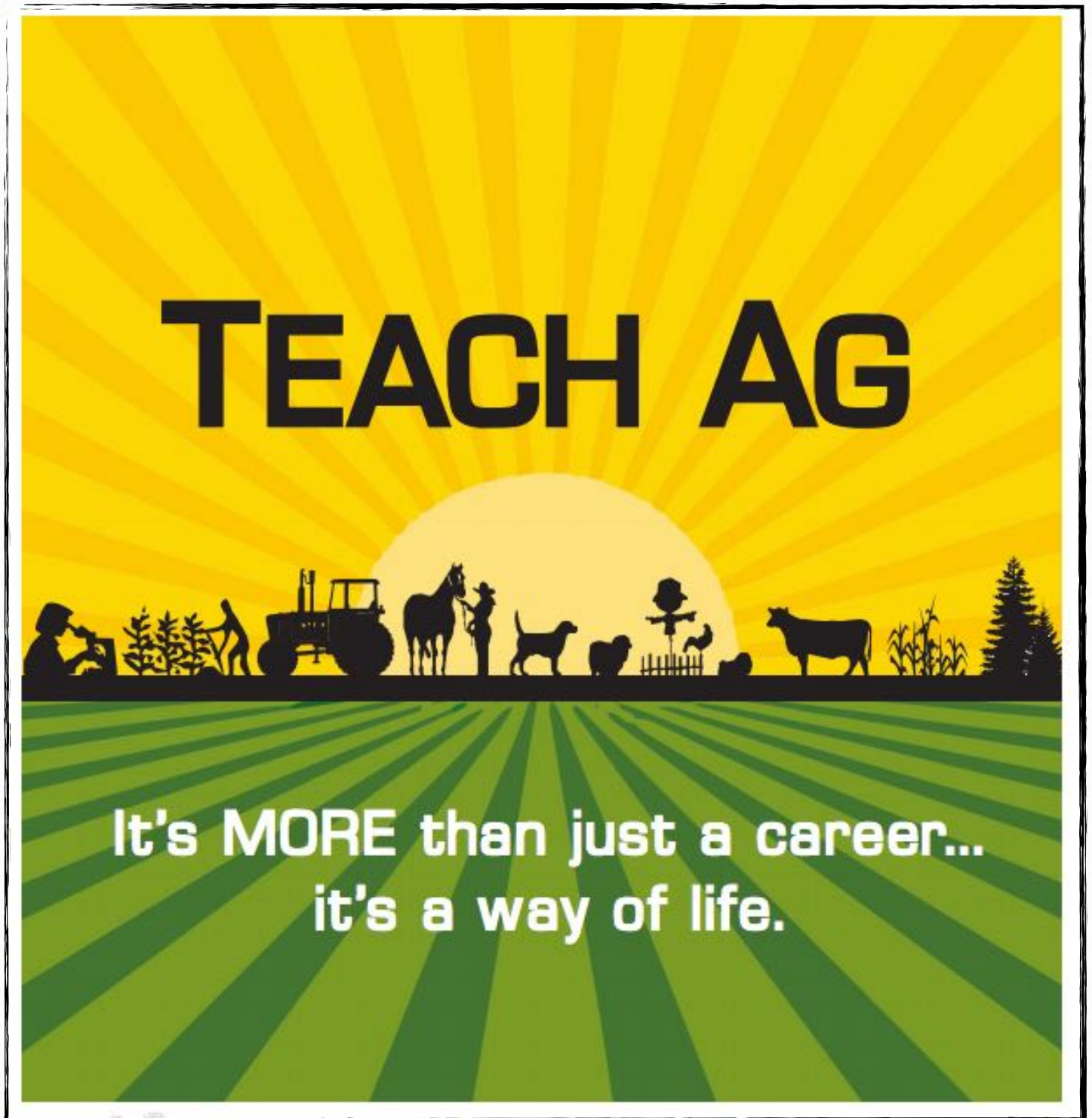
Discussion:

- 1 What crucial other piece of information are we missing from data provided here which would help know which class is most suitable?
- 2 How do we get this information? (Hint – think of technology and outside help)

- 3 What are some problems you see with doing entries two months BEFORE a show? How can this be helped? (current situation we face as EKKA entries are due 5 June 2017)

Created and Shared By Deb Snaith (Macintyre High School)

Resources from Industry



Resources from NSW Department of Primary Industries

Free e-pub with enrolment in [Climate Challenge for NSW teachers online course](#)

Receive the Tocal e-publication, [AgGuide - Managing climate risk on your farm](#), for free when you enrol in Climate Challenge for NSW teachers. This course specifically addresses the NSW Stage 6 Agriculture elective The Climate Challenge but also provides general information in relation to the main drivers of weather patterns in Australia, impacts of climate change to our agricultural systems and risk management techniques and is relevant to the teaching of the Stage 4 and 5 Agriculture syllabus as well. Completing this course contributes 5 hours of NESA Registered PD addressing 6.2.2 and 6.4.2 from the Australian Professional Standards for Teachers towards maintaining Proficient Teacher Accreditation in NSW.

[DPI Schools program you-tube channel](#)

View the latest video resources on the DPI Schools program you-tube channel including: Careers in agriculture - plant pathology, and our biosecurity series on the role that NSW DPI plays in ensuring safe and productive primary industries and within our trade network. 1. Biosecurity monitoring and surveillance 2. The Scientific Collection at Orange Agricultural Institute 3. Preserving the scientific collection 4. Let's talk about aphids. A [teacher guide](#) is available for each and includes a short synopsis, NSW syllabus links, a glossary and a transcript of the video.

Resources from Australian Pork

[Pork Education Toolkit](#) provides separate units for the junior primary, primary and junior secondary years of schooling.

For your free copy of a pork recipe book designed to be used by students in the classroom please contact Lechelle van Breda at APL on 02 6270 8823 or at lechelle.vanbreda@australianpork.com.au

Resources from Plant Health and Animal Health Australia

[Farm Biosecurity Action Planner](#)

STOP!

Do not feed swill to your pigs.

What is swill?

Swill is the traditional name given to food wastes fed to pigs.

Some food wastes are **prohibited pig feed** and are **NOT** allowed to be fed to pigs.

Why is swill feeding illegal?

Swill feeding has been implicated in all the major outbreaks of foot-and-mouth disease in overseas countries including the devastating outbreak in the United Kingdom in 2001.

The regulations prohibiting the feeding of swill exist to keep Australia free from Foot and Mouth Disease and other exotic diseases.



You must not feed meat or meat products or anything that has been in contact with meat to pigs.



These food wastes are prohibited pig feed

Do not feed:

- Any meat products. This includes pies, sausage rolls, bacon and cheese rolls, pizza, salami and other delicatessen meats and table scraps.
- Any carcase or part of a carcase of any mammal or bird. This includes any meat (raw or cooked), bone, blood, offal, hide or feathers. Pigs that feed on carcasses are also at risk of contracting anthrax which is contagious to humans.
- The excreta (droppings) of any mammal or bird.
- Any substance that has come into contact with a prohibited substance via collection, storage or transport in a contaminated container such as meat trays and take away food containers.
- Household, commercial or industrial waste. This includes restaurant waste.

These restrictions apply to all pigs including pet pigs.

Are there any food wastes that are not prohibited substances?

Yes there are provided, they have not been in contact with meat products or stored in contaminated containers.

You can feed:

- Milk, milk products or milk by-products either of Australian origin or legally imported for stockfeed use into Australia.
- Eggs.
- Tallow, gelatine.
- Manufactured dry dog or cat food.
- Dry meal made from meat, blood, bone or feathers processed by commercial hot rendering.
- Non-meat bakery waste.
- Fruit, vegetable or legume waste.
- Vegetable oil or oilseed waste.



If in doubt – don't feed any food waste without checking first!

Jayne Morgan
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Local Land Services
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This publication is prepared as a joint publication for NSW DPI and Local Land Services © State of New South Wales through the Department of Trade and Investment, Regional Infrastructure and Services, 2016. You may copy, distribute and otherwise freely deal with this publication for any purpose, provided that you attribute the NSW Department of Primary Industries as the owner.

Disclaimer: The information contained in this publication is based on knowledge and understanding at the time of writing (February 2016). However, because of advances in knowledge, users are reminded of the need to ensure that information upon which they rely is up to date and to check currency of the information with the appropriate officer of the Department of Primary Industries or the user's independent advisor.
IN 13893 02-16

**contact the PigPass Helpdesk
1800 001 458.**

[illegible]

How **NOT** to handle food waste.

If you are in the food business

There are laws controlling the collection, storage, treatment, and disposal of food waste ('swill') in all States and Territories of Australia. Significant penalties apply for people convicted of supplying and/or feeding swill to livestock, especially pigs.

If you are involved in a business (eg café, restaurant, fast food outlet, hotel, hospital, boarding school, tourist lodge) that results in the production of food waste or you are involved in the handling, transporting, and disposal of food waste it is vital that you are aware of what food waste is permitted to be supplied to livestock owners (especially pig owners) for the purpose of feeding their animals and what food waste is not permitted to be supplied to livestock owners.

Your local Council, Local Land Services or NSW Department of Primary Industries office can supply you with detailed information about how your business can comply with the prescribed legal national swill feeding standards.



You must not feed meat or meat products or anything that has been in contact with meat to livestock.



Why all the fuss over swill?

Foot-and-mouth disease (FMD) has been identified as the single greatest threat of any disease to Australian livestock industries. An outbreak of FMD in Australia would have devastating economic and social impacts. Much of Australia's large export market and the competitive advantage Australia gains from its FMD-free status could be lost, possibly forever. Economic losses, as a result of an FMD outbreak in Australia, have been estimated between \$7 billion (3 month outbreak) and \$16 billion (12 month outbreak).

The feeding of swill to pigs provides the most likely opportunity for the FMD virus to become established in Australia. Most of the FMD risk materials that might enter Australia are illegally imported meat products.

The introduction of other exotic (foreign) diseases to Australia, including African swine fever, classical swine fever, and swine vesicular disease could also have an economic impact on the pig industry in Australia. All three diseases are regularly transmitted in other parts of the world as a result of feeding infected swill to pigs.

Altogether, there are more than one hundred exotic animal diseases that would have varying degrees of economic and/or public health effects if they became established in Australia.

This is why the feeding of swill is banned in all States and Territories of Australia.

Is there any food waste that I can supply to livestock producers?

Yes, as long as it has not been in contact with meat products or stored in contaminated containers.

You can supply:

- Milk, milk products or milk by-products either of Australian origin or legally imported for stockfeed use into Australia
- Eggs
- Tallow or gelatine
- Non-meat bakery waste
- Fruit, vegetable or legume waste
- Vegetable oil or oilseed waste



If you suspect livestock you own, or are responsible for, may have an exotic disease you should immediately notify in one of the following ways:

- Phone your Local Land Services on 1300 795 299
- Contact a NSW Department of Primary Industries veterinarian or regulatory officer
- Call the emergency animal disease watch hotline 1800 675 888 (monitored 24 hours a day, 365 days a year)



Department of
Primary Industries

www.dpi.nsw.gov.au

Pig breeds in Australia

Introduction

There are 8 pure breeds of pig remaining in Australia. Three are common in commercial pork production – Landrace, Large White and Duroc.

The remaining five breeds tend to be used by outdoor producers. Their popularity varies according to their commercial value – Tamworth, Wessex Saddleback, Hampshire, Berkshire and Large Black. Some of these breeds are quite rare.

All the breeds were originally imported into Australia. However for biosecurity reasons there are no imports of live pigs or pig semen permitted into Australia today.

Landrace

This breed was originally developed in Denmark. Landrace pigs were imported into Australia from 1959 until 1973. Most came via New Zealand and Great Britain.

Landrace have white skin, no black hairs and lop ears; popular for commercial pork production.



Figure 1: Landrace gilt.

Large White

This breed was originally developed in England in the late 1700s. It is popular in all major pork producing countries around the world.

Large White pigs have white skin, no black hair and erect ears. They are commonly crossed with the Landrace and this cross is used as the maternal line in commercial herds.



Figure 2: Large White gilt.

Duroc

The Duroc originated in the United States. Duroc lines currently in Australia were imported in 1981 from Canada and New Zealand.

The Duroc are red-brown colour pigs with small lop ears. It is used in cross breeding programs as a terminal sire when crossed with Large White/ Landrace cross sows. The Duroc is not a good maternal sire.



Figure 3: Duroc boar.

Tamworth

This breed would be the least 'improved' of all breeds of British origin within Australia. They are a red breed with erect ears. They are hardy and suited to outdoor production. Tamworth sows make excellent mothers but progeny are slow growing compared to other breeds.

Figure 4: Tamworth sow and piglets.



Wessex Saddleback

This breed was very popular in Australia for many years because of their docile nature, excellent mothering ability and their ability to forage. They are black pigs with a white saddle over the shoulder; and lop ears. Today they are quite rare.

Figure 5: Wessex Saddleback boar.



Wessex Saddleback

Hampshire

The Hampshire is an American breed. It has been used as a terminal sire in cross breeding programs overseas and is valued for quality carcass pigs. They are black pigs with white saddle in the shoulder area and erect ears.

Figure 6: Hampshire gilt.



Hampshire

Berkshire

The Berkshire is popular with outdoor producers and could be said to be experiencing resurgence in popularity. They are a black pig with white on the face legs and tail tip. They are docile and hardy animals.

Figure 7: Berkshire gilt soon to farrow.



Berkshire

Large Black

This breed also originated in England. They are now quite rare as a pure breed. They are a black pig with lop ears.

Large Black pigs tend to get very fat so are more often crossed with other breeds for pork production.

Figure 8: Large Black gilt.



Large Black

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Disclaimer: The information contained in this publication is based on knowledge and understanding at the time of writing (November 2016). However, because of advances in knowledge, users are reminded of the need to ensure that information upon which they rely is up to date and to check currency of the information with the appropriate officer of the Department of Primary Industries or the user's independent adviser.

[jtn14218]



Innovation News provided by NSW Department of Primary Industries

The farm that runs without air, soil or water

A massive indoor vertical farm is about to open in the US and it uses no sunlight, no soil and very little water.

This start-up uses machine learning and satellite imagery to predict crop yields

Corn yield prediction is big business in the US - grain elevator operators, ethanol producers, commodities traders, hedge funds, insurance companies, and even the farmers growing the corn will all look to the USDA's August crop report to try and understand how the supply side of the corn market will behave. Descartes Labs, a start up, are using satellite imaging data and machine learning algorithms to predict crop yields to figure out how healthy the corn crop is from space.

Apple picking robot targets labour hungry fruit sector in Australia

A team of engineers from California are close to commercialising a machine that strips a canopy of apples using a vacuum arm. For the past five years they have been working on the prototype in orchards in Washington State and, more recently, at Warragul in south-east Victoria.

Fenceless Farming

Stock will soon be kept in check without a wire in sight - that's the promise of technology being developed in Australia with New Zealand investment partners. The eShepherd technology works by placing a GPS-enabled collar on an animal, "virtually" fencing off an area and training the stock to stay within the boundary.

Robots Wielding Water Knives Are the Future of Farming

More and more, agriculture is about automation but the future will include humans modifying food to fit robots as much as they modify their own behaviour to suit the machines.

Western Sydney University Greenhouse Facility

The attendees of the Sydney NSWAAAT conference in January toured the new glasshouse facility at Western Sydney University.

The new research and teaching greenhouse is nearing full production. The first tomato crop was planted on the 22nd of March, and has been an integral part of the 2nd year subject on protected



horticulture. Students have monitored the growth of the plants, learnt about the complex glasshouse environmental and irrigation control systems and participated in routine crop management processes such as pollination.

The first harvest of the smaller varieties of fruit occurred on the 18th May, and the other larger varieties are nearly ready. I can vouch

for the quality of the fruit which were sweet, firm and evenly coloured. Future harvests will be donated to local food banks.

The first planting of cucumber will have occurred by the time you read this, and promises to be another bountiful harvest.

These early crops are to prove the systems of the glasshouse on well known production systems before the 8 climate controlled rooms will move to research projects related to intensive protected horticulture. The larger teaching space will continue in normal production of glasshouse crops.



If you would like to see the facility you can make arrangements with April at Western Sydney University. p)02 4570 1567 or e) April.Browne@westernsydney.edu.au. Note that there are quarantine procedures for glasshouse access so some requests might not be able to be accommodated.

David Randall (WSU Volunteer and former Richmond High School Agriculture Teacher)

Farm Biosecurity Plans and Johne's Disease



Local Land
Services
Greater Sydney

FARM BIOSECURITY PLANS AND JOHNE'S DISEASE

Johne's disease (JD) is a serious wasting disease that affects various species of animals. In Australia, JD has been found in cattle, sheep, goats, deer and camelids.

JD infections are caused by the bacterium, *Mycobacterium paratuberculosis*, which live mainly in animal intestines, but can survive in the outside environment for several months.

JD bacteria affect animals by causing a thickening of the intestinal wall resulting in a reduction in the normal absorption of food. The infected animal is hungry and eats, but cannot absorb any nutrients. This results in wasting and finally death. Diarrhoea and bottle jaw are also common signs in cattle.

Johne's disease may be transmitted between cattle and sheep, where co-grazing occurs and one of the two species becomes infected.

The bacteria causing JD are resilient and can live for a long time in the environment. Research in southern Australia showed that heat and sunlight destroyed the bacteria; under normal summer conditions in paddocks and waterways, around 90% of the bacteria die within 6 weeks. But in moist, shaded conditions, JD bacteria can survive for longer than 12 months.

Cattle infected with JD excrete the bacteria in their manure. The bacteria contaminate pasture and watercourses, spreading infection to other cattle sharing the same paddocks or yards.

NEW APPROACH TO JOHNE'S DISEASE IN CATTLE

The new, national approach to Johne's disease (JD) in cattle – the BJD Framework – offers a fresh approach to the management of the endemic disease. It focuses on managing on-farm biosecurity risk rather than controlling disease through regulation, and treats JD as just one of many diseases that producers must manage within their business.

Supported by more flexible regulation, producers will be able to make informed decisions about the opportunities and risks associated with purchasing livestock.

Please refer to the following link:

https://www.animalhealthaustralia.com.au/wp-content/uploads/AHA-Cattle-JD-Factsheet_FA2.pdf

Biosecurity focuses the way of the future for livestock producers.

Level 4, 2 - 6 Station St Penrith | PO Box 4515, Westfield Penrith NSW 2750
Tel: 1300 795 299/ 02 4725 3050 | www.lis.nsw.gov.au

The voluntary **Johne's Beef Assurance Score (J-BAS)** has been developed to assist beef cattle producers in identifying the risk of Johne's disease (JD) occurring in a herd.

Please refer to link to the Johne's Beef Assurance Score document:

https://www.animalhealthaustralia.com.au/wp-content/uploads/AHA-Cattle-JD-Factsheet_FA2.pdf

An on-farm biosecurity plan is also required for J-BAS.

Transitional arrangements for J-BAS end on 1 July 2017 and cattle producers across Australia are urged to implement an **on-farm biosecurity plan** in order to maintain their current J-BAS. J-BAS is managed by **Animal Health Australis (AHA)** on behalf of the **Cattle Council of Australia (CCA)**, who represents the industry.

To get information about farm biosecurity plans and a plan template please use the following link:
<http://www.lbn.org.au/farm-biosecurity-tools/planning-tools/>

Once developed the farm biosecurity plan does not need to be sent anywhere but should be carefully filed so that it can be produced if required e.g. if you have declared on a National Cattle Health Declaration that your herd is J-BAS 6, 7 or 8, a potential purchaser could ask to see your plan to be assured that your plan for Johne's disease minimizes the risk of infection of your herd.

Also please note that if you wish to maintain a J-BAS assurance level of 7 or 8 you are required to have a veterinarian sign off on your farm biosecurity plan and review it annually. In this case you should contact your private practitioner and discuss this further with them.

The above information is a brief summary of on-farm biosecurity plans and Johne's disease. If you require further help and advice please contact Greater Sydney Local Land Services on 4724 2100 or contact me directly on the details listed below.

Kind regards

Lisa Goodchild BVSc DipVCS (N5578)
District Veterinarian
Greater Sydney Local Land Services
lisa.goodchild@lls.nsw.gov.au
4724 2135
0427 559 656

NEW APPROACH TO JOHNE'S DISEASE IN CATTLE

FACT SHEET

Overview

The new, national approach to Johne's disease (JD) in cattle – the [BJD Framework](#) – offers a fresh approach to the management of the endemic disease. It focuses on managing on-farm biosecurity risk rather than controlling disease through regulation, and treats JD as just one of many diseases that producers must manage within their business.

Supported by more flexible regulation, producers will be able to make informed decisions about the opportunities and risks associated with purchasing livestock.

New approach to JD in cattle... what does it mean for me?



Key changes

A number of changes have occurred under the new JD in cattle Framework.

- Most states removed regulation on 1 July 2016. Western Australia will continue to regulate JD in cattle and the Northern Territory has interim arrangements in place. More information can be found on the [Department of Agriculture and Food WA website](#) and the [Northern Territory Government website](#).
- Ceasing of quarantining of properties as a control measure in most states.
- Movement to a market-driven approach where producers undertake practices dependent on market requirements.
- From November 2016, the Australian Johne's Disease Market Assurance Program for Cattle (CattleMAP) has transitioned to alternative industry assurance systems.

Tools

The following [tools](#) are available to assist producers:

- Revised National Cattle Health Declaration (formerly the Cattle Health Statement).
- A new voluntary risk profiling tool for beef cattle – the Johne's Beef Assurance Score (J-BAS) – and the revised Dairy Score for dairy herds.
- JD Biosecurity Checklist to assist producers determine questions they may want to ask about the JD history of livestock.
- Cooperative Biosecurity Group Guidelines for producers who wish to work together to enhance their biosecurity.

FREQUENTLY ASKED QUESTIONS

Q: What process should I follow when purchasing cattle from interstate?

A: JD requirements may differ between jurisdictions. Before purchasing cattle, producers should consider all animal health and transport requirements for the state they are moving cattle to. For specific information see relevant state/territory department of agriculture websites. Information can also be found at:

www.animalhealthaustralia.com.au/what-we-do/endemic-disease/livestock-movements/

Q: Will the new approach lead to increased costs?

A: Most producers undertake on-farm biosecurity, so will see little change. Moving JD into a biosecurity model may lead to decreased costs associated with pests and diseases entering their property. The removal of quarantining allows producers to market their cattle, provided full disclosure of disease status is given.

Q: What role will the government play during the Framework's implementation?

A: Many state and territory governments have revoked their JD in cattle legislation, except for it remaining a notifiable disease. Government animal health staff will continue to provide technical advice and extension on the disease.

Q: What do I do if my cattle have signs consistent with JD?

A: Producers should call a private or government veterinarian to investigate. Although a finding of JD is notifiable to your state or territory's department of primary industries or agriculture if you suspect or confirm the disease, in most jurisdictions there will be no other government action. In WA and the NT further actions may result after notification - producers should check with their departmental animal health officers about this.

Producers in other states are free to decide what method they want to use to manage the disease in order to meet their market requirements.

The JD Counsellor is a valuable resource for beef producers who have a detection of JD in their cattle:

- **Mr David Allan - P: 0427 572 879**

Q: Where can I access tools and resources to help me with my on-farm biosecurity risk management?

A: The [Farm Biosecurity website](#) has a suite of biosecurity information and tools. Information is also available at the [Livestock Biosecurity Network website](#), including contact details.

Q: What was the outcome of the CattleMAP Review?

A: From 1 November 2016, it was decided to discontinue CattleMAP and replace it with alternative industry voluntary assurance systems.

More information related to these changes can be found on the [CattleMAP webpage](#).

Q: What alternative JD assurance systems are there?

A: There is a new voluntary risk profiling tool for beef cattle – the [John's Beef Assurance Score](#) (J-BAS). The [Dairy Score](#) has also been revised for dairy herds. Transitional arrangements for J-BAS end on 30 June 2017, so producers wanting to utilise it need to have their biosecurity plan in place by then.

Q: What happens if I was a previous CattleMAP participant?

A: From November 2016, CattleMAP herds have transitioned to a J-BAS of 8 or Dairy Score of 8; the highest assurance level. This level requires a property biosecurity plan monitored by a veterinary advisor and testing.

After November 2016, any herds wanting to continue with the higher assurance scores, should resume any testing that may be required for the relevant score. Participants should check the WA and NT entry requirements to make sure they are able to access these markets.

Q: How do I develop a farm biosecurity plan?

A: The *National Farm Biosecurity Reference Manual - Grazing Livestock Production* can be used as a basic biosecurity plan. Livestock Production Assurance (LPA) will soon require a biosecurity plan, commencing July 2017. The Livestock Biosecurity Network (LBN) website is a source of information, plans and contacts for the LBN Regional Managers. All plans should also include the JD Biosecurity Checklist to be eligible for J-BAS.

Q: Where can I find more information about the new approach to JD in cattle?

A: JD in cattle information is available on the Animal Health Australia [website](#).

Animal Health Australia

Animal Health Australia works in partnership with our Members and stakeholders to keep Australia free of new and emerging diseases and to improve animal health, enhance market access and foster the resilience of the Australian animal health system.

Working together for animal health

Learn more

w: animalhealthaustralia.com.au
e: johannes@animalhealthaustralia.com.au
p: 02 6232 5522

Biosecurity plan checklist - Johne's disease in cattle

Johne's disease risk is just one part of a farm biosecurity plan. This document should be used in conjunction with the *National Farm Biosecurity Reference Manual - Grazing Livestock Production* which is available from www.farmbiosecurity.com.au

The purpose of this checklist is to provide advice about:

- (a) the components of a farm biosecurity plan that are specific to Johne's disease
- (b) things to think about when assessing the risk of Johne's disease when purchasing cattle.

The Biosecurity principles below refer to those described in the National Farm Biosecurity Reference Manual described above.

Principle 1 - Livestock

Manage the introduction and movement of livestock in a way that minimises the risk of introducing or spreading infectious disease (in this case Johne's disease)

Before purchasing stock, you will need to assess your individual Johne's disease risk requirement. This will vary from enterprise to enterprise. For example, a stud farm may be particularly focussed on ensuring they do not purchase Johne's disease infected cattle, whereas on a farm that purchases young stock for fattening and sale, Johne's disease may be less important. Not all of the items in this checklist will be appropriate for all properties.

Issue	Comment
Cattle Health Declaration (CHD)	All purchases should be accompanied by a CHD which should be retained (for at least 7 years) Consider: Does property of origin hold CHD for all purchases? Does the CHD consider the risk of all properties during lifetime, especially between birth and 12 months of age?
Johne's Beef Assurance Score (J-BAS)	Request the J-BAS of the cattle being bought Consider: Aim for equivalent or higher score (lower risk), OR Match to your situation and risk profile
Biosecurity plan	Does the property of origin have a biosecurity plan? What are the specifics of JD management on the source property, and how do they match my own standards?
Dairy risk for beef industry	Have the cattle had (potential) exposure to dairy animals or land? The Dairy Assurance Score for dairy cattle or dairy-cross animals is equivalent in terms of risk to the J-BAS

JD in sheep risk	Have the cattle had (potential) exposure to sheep (or land) which may be JD infected? Consider: What is the status of the sheep (SheepMAP/infected/ unknown)? Are the animals from a Regional Biosecurity Plan area for JD in sheep? What is the sheep JD vaccination (Gudair®) history?
History - Infection	Is there a history of JD infection on the source property? Consider: When the infections occurred, how were they diagnosed and what action has been taken to resolve the infection (if any)
History - Suspicion	Is there a history of suspicion around clinical signs that might suggest JD on the property? Consider: Details - When, what signs, how investigated, results, etc? What action has been taken to resolve, if any?
History - introductions	Is there a history of introduction of cattle from a herd where infection has been confirmed? Consider: Details - Introduction details, how investigated, results, etc? What action has been taken to resolve, if any?
Previous negative herd testing	The CHD provides some information, but you may consider requesting more details. Consider: What additional testing has been undertaken, if any? Sample test: When? Check test: When? Other? Details: e.g. negative results from investigation of suspect cases or cattle with clinical signs of JD
Vaccinated	Are the cattle vaccinated with Silirum®? Has Silirum been used on the origin property as a JD management tool?

Your Biosecurity plan also needs to account for risks to stock after you have purchased them.

Issue	Comment
Boundary fences	Regular inspection and maintenance to keep stock-proof Consider double fencing high-risk boundaries
Gates and grids	Regular inspection and maintenance, gates kept closed
Strays	Documented plan for dealing with strays Consider strays both onto and off property Assess potential risk and treat accordingly on case-by-case basis

Principle 5 - Animal Health Management

Prevent and control animal diseases on farm by regularly monitoring livestock health

Issue	Comment
Investigate/notify suspect cases	Any suspect clinical cases investigated and notified to CVO, in accordance with state legislation
Minimise potential exposure to infection or risk of infection	<ul style="list-style-type: none">• Identify high-risk animals and prioritise for culling• (Suspect) Clinical cases• Dam, progeny and maternal siblings of clinical cases• Calfhod cohorts of clinical cases• Test-positive animals• Animals originating from high-risk sources
	Don't graze young animals in high-risk areas (e.g. adjacent to high-risk neighbours, with infected sheep, on land grazed by clinical or suspect cases)
	JD vaccination of calves
Manage JD risk from sheep	Minimise cattle, and particularly calves, co-grazing with sheep
	Determine the JD status of sheep on the property (on-farm testing or abattoir monitoring)
	Vaccinate sheep if infected or at-risk for JD
Manage risk from other species	Evaluate potential risk from other species (goats/alpaca/deer) and implement measures as appropriate
Declaration	Producers must be truthful when completing Health Statements
Spread to other herds	If infection is detected, assess risks within the herd and notify people who have previously received cattle as low-risk to enable them to manage their revised risk.

Principle 7: Carcass, effluent and waste management

Disposal of dead animals and waste is managed to minimise the spread of disease

Issue	Comment
Manure/effluent	Affected waterways have been found to spread JD. Potential sources of manure or effluent, including cross-boundary waterways, identified and treated to minimise risk of spreading infection

ON FARM		TIPS
ALL CATTLE	House dogs in area away from grazing stock. Restrict on farm access of outside dogs to property to reduce introduction of dog diseases or parasites. Ensure farm dogs are vaccinated against distemper and parvovirus. Use regular parasite control of farm dogs and de-worm farm dogs every 4-6 weeks with a tapewormer. Restrict use of stock yards and handling facilities to own stock.	Reduce possible parasite infection of grazing stock with hydatids or Neospora. Put a reminder on your calendar for dog treatments.
	Know the diseases and health status of your herd or local area: <ul style="list-style-type: none"> • theileria • bush ticks, paralysis ticks • Pestivirus, leptospirosis, vibriosis • Clostridial diseases • Buffalo Fly 	Investigate poor reproduction, ill thrift and mortalities to identify diseases that can be managed or prevented. Buffalo fly and lice and tick treatment options such as backliner products should consider potential damage to dung beetles. Consider ear tags or non-synthetic pyrethroid options.
PREVENTATIVE HEALTH PROGRAMS	Determine the likelihood of diseases and potential consequences. Vaccination or treatment programs to manage the risk of: <ul style="list-style-type: none"> • Bovine Ephemeral fever • Pestivirus • BRD • Pink Eye • Leptospirosis • Clostridial Diseases • Tetanus • Pulpy Kidney • Blackleg 	The pulpy kidney component of 5 in 1 vaccines only lasts 3 months. During high risk periods, give a 5 in 1 booster every 12 weeks. 8 in 1 has a 12 month protective claim.
BULL VACCINATIONS	Ensure all bulls are fully vaccinated annually for: <ul style="list-style-type: none"> • Clostridials (5 in 1), • Leptospirosis (or 7 in 1), • 3 day sickness (if necessary) • Vibriosis 4 to 6 weeks prior to joining. 	Primary course of two doses at least four weeks apart and then annual booster. Avoid bulls straying in or out.
COWS & BREEDERS	All cows are to be given: <ul style="list-style-type: none"> • 5 in 1 vaccinations • 7 in 1 if lept risk • Pestigard if required 	Need to vaccinate for leptospirosis or pestivirus. Should be based on risk assessment, including serological evidence of the pathogens.
STEERS AND NON BREEDING STOCK	All should receive 5 in 1 and boosters Consider vaccination with: <ul style="list-style-type: none"> • Pink eye vaccine • Pestigard • Bovilis MH 	The need to vaccinate for pink eye or respiratory disease should be based on enterprise type and risk. Consider using fly control methods such as ear-tags, back rubbers and pour-on chemicals to manage pink eye. Minimise duration and times spent in dusty yards.
	Control roundworms: use appropriate chemical drench treatment at induction/ arrival to property. Drench to correct weight of individuals or the heaviest weight of a sample. Know what drenches work and what don't. Perform faecal egg counts on cattle under 12 months of age every 2-3 months.	Follow mla.com.au cattle parasite atlas for recommendations.
	Control liver fluke: If in a fluke area, use a fluke drench April/May (seek advice for additional times).	The April drench is the most important drench for control of both immature and adult fluke. Consider using a triclabendazole product.



Local Land Services
Northern Tablelands

Level 2 Farm Biosecurity Plan

Beef Cattle



Hotline Numbers

24-hour Emergency Animal Disease Watch Hotline: **1800 675 888**

24-hour Exotic Plant Pest Hotline: **1800 084 881**

Level 2 Biosecurity Plan: Beef Cattle



PRE-ARRIVAL		TIPS
ALL CATTLE	Determine origin source of cattle if possible. Preference for stock selection from single source or vendor bred stock. Stock from saleyards may pose a higher disease introduction risk from increased exposure to stock from multiple properties. Preference for stock selection from single source or vendor bred stock. Insist on a cattle health statement CHS AND NVD with purchase. Only purchase stock with NVD available with purchase. If any stock have undergone testing ask for a copy of results or owner declaration on CHS. Sight test results prior to livestock being accepted. Alternatives include video footage, or description by a trusted 3rd party. Wherever possible undertake a pre-purchase inspection or 3rd party inspection by someone whose judgement you trust.	Know what you are buying. Ask questions and make sure you read the Cattle Health Statement BEFORE you buy. Keep your paperwork for a minimum of 5 years and file it in one spot.
	If John's disease is important to your enterprise ask about recent history or John's disease risk of properties the stock have resided on under 12 months of age.	John's disease is normally contracted under 12 months of age. Disease history for the whole life of animals is important. John's disease poses a greater risk to enterprises selling bulls or replacement female stock, as potential buyers are required to demonstrate that they are managing the risk of introducing the disease.
BULLS	Buy directly from reputable breeders, avoid use of second hand bulls. Should have recent breeding soundness check prior to arrival. Ascertain any purchase guarantee in writing. Review and understand any test results, EBVs or genomics testing. Sight test results prior to livestock being accepted, including: <ul style="list-style-type: none"> • Pre-purchase veterinary physical examinations • Semen tests • Blood tests such as • Pestivirus • Arthrogryposis Multiplex • Developmental duplications are available. Understand these disorders and test results prior to purchase. View and understand any declaration of vaccination (leptospirosis, pestivirus, vibriosis or 3 day sickness).	Buy Pestivirus tested antigen negative and antibody positive bulls (avoid buying in persistently infected or PI animals). Use available tools to purchase bulls appropriate to herd needs and minimise potential calving issues. Cattle health statement will have information on vaccinations and treatments received prior to purchase. Review these to see what is required at induction. Genetic disorders and testing varies between breeds so follow this up prior to purchasing.
COWS	Request pregnancy test results or joining details. View declaration of vaccination and factor into induction to on farm health program.	
	Preference for stock selection from single source or vendor bred stock.	Avoid boxed lots or traded cattle-unknown disease risk unless fully tested.

ARRIVAL		TIPS
ALL CATTLE	Identify, isolate and monitor introduced stock to prevent the transfer of infectious disease for a minimum of 21 days (but as long as possible).	Hold in separate paddock for as long as practical if feed or water supply allows. Alternatively regularly monitor.
	If purchased cattle from Queensland, monitor for cattle tick. Place cattle in quarantine paddock for 4 weeks and monitor daily. If introduced cattle from the cattle tick area in Queensland, treat all stock on arrival with an ML and monitor for cattle tick. Ideally segregate stock for 3 weeks.	Monitor for any ticks on stock.
	Purchaser is responsible for ensuring the NUS database is updated within 7 days of arrival. If buying through the saleyard, the transaction should be made for you. Check with your agent that the transfer will be done. Login and check the NUS database yourself.	Check with your agent that the cattle have been transferred into your name. Note: Auctions Plus does not transfer stock for you and it remains your responsibility to scan and upload details. Ask your agent for help with this.
	Good practice is for all cattle to be treated for internal and external parasites upon entry unless the CHS indicates they have just been treated.	Avoid introducing worms, fluke, bush, paralysis or cattle ticks, buffalo fly.
COWS	Introduced cattle to be given clostridial vaccine. Based on your Farm Biosecurity Plan vaccinate introduced stock to have the same vaccination protection as animals already on farm. See preventative health section.	If vaccination status is unknown or questionable assume they have never been vaccinated and start with 2 vaccinations 4 to 6 weeks apart for all vaccines.
	Avoid boxing purchased PTIC cows with other PTIC cows if possible until calved or known relevant vaccination status for Pestivirus.	Do not introduce new cattle to a breeding herd in the early stages of pregnancy. Consider Pestivirus tests or vaccinations for home bred or introduced cows.

ON FARM		TIPS
ALL CATTLE	Ensure good groundcover to minimise ingestion of soil by stock and minimise erosion of soil.	Best practice groundcover is 70-90%.
	Ensure the boundary and internal fences are stock proof. Good practice is to have some internal fences or holding paddocks near yards to allow stock treatment or isolation if necessary.	Holding paddocks with water facilities are useful infrastructure improvements that can allow biosecurity quarantine measures to be implemented.
	If your property is located in a high risk Anthrax area, understand the anthrax history.	Have cases of sudden death investigated to exclude Anthrax.
	Monitor stock regularly for signs of illness. Isolate and seek veterinary treatment for sick stock.	You need to inspect your stock, check the healthy ones first and always handle sick stock or hospital isolation paddock stock last.
	Investigate any significant mortalities and ensure stock handlers have knowledge to identify sick stock or stock diseases.	Attend training and keep up to date with stock diseases. Know what to look for. Seek advice and talk to your vet.
	Promptly remove and dispose of any dead livestock. Bury or burn carcasses in situ.	Have a designated burial site and avoid scavenging of carcasses where possible.
	Ideal yard designs would allow dampening of yards before yarding to reduce dusty conditions. In reality this is difficult to do on most properties.	Avoid exposing weaners to dry, dusty conditions to reduce exposure to pinkeye and Q fever.

4

Professional Development



Online Agriculture Careers Expo

RuralBiz Training will be hosting a free online Agriculture Careers Expo on **Tuesday 1 August from 11am-1pm AEST**. This is a fantastic opportunity for agriculture teachers, primary industries teachers, careers advisors and others who assist young people entering the workforce to gain up to date insights into the career opportunities available in the broad field of Agriculture. The speakers will be top level professionals from some of Australia's most successful Agricultural companies, and the online format removes the barriers of distance making the event available right across the country. Agriculture is a thriving Industry with competitive salary packages and it is important that young people continue to seek out careers and further education in this field.

Year 11 & 12 Students are also welcome to attend with teacher supervision.

Topics include:

- Working in Agriculture - overview of salaries and conditions (Holmes Sackett)
- Types of jobs, salaries & conditions (Consolidated Pastoral, Costa additional speakers to be confirmed)
- Pathways in Agriculture Education (RuralBiz Training, University of New England)
-

[Registration Form](#)

If you have any questions regarding this event, contact 02 6884 8812 or Melanie Moeller (Rural Biz Training) mmoeller@ruralbiztraining.com.au

Do you use social media to promote Ag in your school? With the permission of your school and the students, social media provides opportunities to target the whole school. An ag account can always hashtag (#) to the main school account. The example shown in the picture is Marian College, Kenthurst's Ag instagram account.



National Association of Agricultural Educators Conference



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Sunday 7 – Thursday 11, January 2018
Launceston, Tasmania

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and innovation in
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Logos: Tasmanian agricultural education NETWORK, Tasmanian Government, and a collection of agricultural icons (sheep, cow, pig, chicken, rabbit, etc.)

We are looking forward to a strong NSW presence at the National Conference. The program looks to be full and loaded with exciting events. I am sure the Tasmanian Association is keen to showcase the best that agriculture has to offer. If you are planning on attending it would be advisable to book flights or passage on the ferry as early as possible, as they can book out quickly at that time of the year.

The NSWAAAT executive will be applying for accreditation of the conference for NSW teachers. We will keep you posted on our progress.

[The conference program and an active link to registration.](#)

Conference Dinner
Speaker
Michael McQueen



Michael McQueen understands what it takes to thrive in a rapidly evolving world. Widely recognized for having his finger on the pulse of business and culture, he has helped some of the world's best-known brands navigate change and stay ahead of the curve.

As a leading specialist in demographic shifts, change management and future trends, Michael features regularly as a commentator on TV and radio and has written four bestselling books.

His first book, *The 'New' Rules of Engagement* focuses on strategies for leading and connecting with Generation Y. His newest release, *Winning the Battle for Relevance* is a revealing look at why even the greatest brands and organisations become obsolete... and how to avoid their fate.

Michael is a familiar face on the international conference circuit having shared the stage with the likes of Bill Gates, Whoopi Goldberg and Larry King. He has spoken to hundreds of thousands of people across 5 continents since 2004 and is known for his high-impact, research-rich and entertaining conference presentations.

In 2015, Michael was named Australia's Keynote Speaker of the Year and was inducted into the Speakers Halls of Fame.



FOOD AND FIBRE - THE ORIGINAL

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5

Around the Schools

Do you have something to share from the school farm or from an excursion. Please email baat.editor@gmail.com



Bossley Park High School Ag Show Team, Ag Teacher John Killeen and Premier of NSW Gladys Berejiklian at Berry Show

Chevalier College Show Team

The last few weeks of Term 1 and the start of Term 2 have been busy for the Chevalier show team.



We ended Term 1 with exhibiting three steers at Sydney Royal. Two were ours and one we prepared for another stud. The kids had a fantastic time and we would like to sincerely thank Elizabeth Macarthur and Nicolet for helping out and holding the fort while we were not on site.

We didn't do any good on the Hoof, but as I always tell my team, that's not the part we care about, otherwise we would just enter a stud class. It's the Hook results we want to do well in.

We got 80 points for "George", 80.5 points for Ranbow, winning a Bronze medal and 87.5 points for "Muster", winning a Silver Medal. We also won highest point score school Angus for the carcass and Angus over 85 points. We were awarded the Noel Williams Trophy for the best school Angus on the hook. We were very appreciative and proud to receive this award. We would like to thank Mr Richard Buck from Angus Australia for coming to present the award.





The team exhibited sheep, fleece and cattle at Hawkesbury show at the start of May. It was a successful day with both steers selling at auction, one student placing third in paraders, winning first, second and third in the fleece, winning supreme fleece, winning most successful school in the sheep section, champion ram and champion ewe and supreme sheep exhibit.

We also won first place in the grand parade. The kids were exhausted after running between sheep and cattle but had a great time.



We have now turned our attention to “Half way” the Hereford in preparation for UniSchool competition.



Hayley Mahoney (Agriculture Teacher, Chevalier College)

Chifley College Bidwill Campus



As part of our horticulture unit students in Years 9 and 10 studying Agriculture at [Chifley College Bidwill Campus](#) grow, harvest, market and sell chrysanthemums in celebration of Mother's Day. This year in excess of 160 bunches of flowers were prepared and sold through the school raising a total of \$765. The profits raised are used to support the ongoing operation and continued development of our school farm.

Our school started this venture six years ago when we sourced cutting material of chrysanthemums from a supplier in Broken Hill. The original plant material was flown to Sydney in the carryon baggage of resident and friend living at the Hill. The cuttings were prepared using rooting powder and set up in mini greenhouses. We achieved a good strike rate and soon had about 30 plants under cultivation. From that point, we expanded the number of plants using both cuttings and splitting. More recently we simply split the plants in early spring and currently have about 200 plants under cultivation.

The annual growing cycle requires students in Year 9 to split and replant their crop. As the students move into Year 10 they carefully monitor the growth of the plants over summer. Rust disease is the biggest problem, especially in wetter months. By allowing good air flow



between plants we have minimised the impact this year without the use of anti-fungal sprays. A good fertilizer application as the plants start to bud also helps to maximise flower yield.

On the Friday before Mother's Day it's all hands-on deck. A small team of students start cutting around 7am and the harvested flowers laid out on tables. The next team strips the stems of excess leaf and ensures that each stem is long

enough and the flower in peak condition. "Bunchers" then bundle the stems into a generous bunch which is secured by an elastic band. The bunch is finally carefully wrapped in florists' paper and placed in transport boxes.

From there the flowers are loaded into a trailer and relocated to the school's quadrangle and offered for sale. By the end of lunch time over 100 bunches have been sold to students and staff at \$5 a bunch. Excess flowers are offered for sale via the farm gate on Saturday and Sunday.

Chrysanthemums are a great plant to use. They are relatively easy to grow with careful monitoring and allow the students to follow the growing cycle over the full year. In addition, the students get to participate in all of the post-harvest activities including marketing and sales. They really get involved following the product from paddock to final consumer.





David Giblin (Agriculture Teacher, Chifley College, Bidwill Campus)



Redbend Catholic College



1st place in live class

At the end of last term the Red Bend Cattle team returned from a week at the Sydney Royal with a couple of ribbons for live placings and a host of great memories from wonderful times. Ten students prepared 10 steers for this year's show. Once we arrived we had a day to get settled into our site at the showground. Our site location has to be constantly checked for tidiness and the bedding for the animals is to be kept clean as much as possible. The steers have to be washed and walked regularly around the showgrounds, and feed and water must be kept up to them. There are many other activities that take place leading up to the big day but on the Thursday the major judging begins. One of our Limousin steers – “Lunch Box 2” – placed 1st in the middleweight class. This steer was bred by Phil and Sheridan Kirk – parents of Laura, a member of the team. Following the judging some of the steers are auctioned. Four of our steers were auctioned and Lunch Box 2 was sold for \$7.05/ kg – it's amazing what people will pay for a ribbon. The other 3 also sold well (closer to market price) and the remainder of our 6 steers were sold over the grid – the price set by the abattoirs. On the Sunday the steers were loaded onto the trucks to be transported to the abattoirs to be judged on the hook (carcase). This

is a sad time for all of us and I like that the kids get attached to their animals and have some emotions flowing at this event. After we return home from Sydney we wait for a phone call to see if we are invited to the carcass presentations – this only comes if you are winning major ribbons – and yes we received the call. I was going OS for a little holiday so Nat Hayes and Gerard Barklmore were very happy to sit in for me at this event. And to our delight the carcass results were brilliant. In brief this is what we came home with- • 2 Gold medals —

For “Mayhem” and “Kubota” • 1st and Championship broad ribbon – “Mayhem” –Mayhem



Mayhem – winning carcass animal

was awarded Overall Heavyweight Champion Carcass with 92 pts – just .05 points from winning it all! • 2nd place for Kubota in lightweights • 3rd place for “Donald” – our school steer who was injured just weeks before the show and had a lot of TLC (and money) to get him right. • 5 Bronze medals – Donald, Luxury, Lima, Leonardo and Lunch

Box 2 Overall we were awarded the 2nd Most Successful School with 3 carcasses. But besides the cattle awards - the students have gained so much. The opportunity to compete at a Royal show and the many different facets that spending a week in the “big smoke” provides. From meeting students from other schools, talking with people from the beef industry, meeting the media, interacting with the public that visited our site in the cattle shed and shopping at Woolworths Rose Hill – this all adds to their life experience and hopefully gives them a strong basis to begin and continue to form their own future. In addition, Red Bend students competed in various State finals of Junior Judging competitions at the Royal. This is a very special achievement and one that holds much honour regardless of placing or not. In a nutshell the results are as follows:

- Cattle Parading Natalie Hayes, Kelsey Muller, Laura Kirk and Mikayla Carey – Mikayla awarded 5th place in 17's
 - Meat sheep – Mitch Rubie – 5th place • Cattle Judging Kelsey Muller – 5th and Nat Hayes 7th * Grain Judging Kelsey Muller and Mitch Rubie- 3rd place * Fruit and Veges.
- And finally in the world of agriculture, Mitch Rubie- after finishing at the show- attended a Rotary camp for Cotton enthusiasts at the start of this term.

Susan Earl (Agriculture Teacher, Redbend Catholic College)



Redbend Showteam

St John's College Woodlawn



Steers on grain lucky as they were not going to see any grass anyway.



Ag Centre land under water

Flood Photos from [St John's College Woodlawn](#) during the March 30/31st 2017 Flood

This was an extreme weather event for the Far North Coast with 395mm of rain recorded at the Ag Centre at Woodlawn College in a 24 hour period resulting in the biggest flood to hit Lismore since 1974. The College escaped with minimal damage, other than the majority of the College farm (15 Hectares) and the ovals inundated with up to 4m of flood water for some 3 days. Livestock were moved to limited high ground for the duration of the flood requiring daily feeding. Despite the inconvenience we were still able to take our Charolais Bull to the Sydney Royal Easter Show. Luckily the bull was not at the College when the flood hit the region and was taken to Sydney by a parent from the College. This was a the first time we have exhibited cattle at the Sydney Royal and it proved a great experience for the students, involved despite not picking up a ribbon.

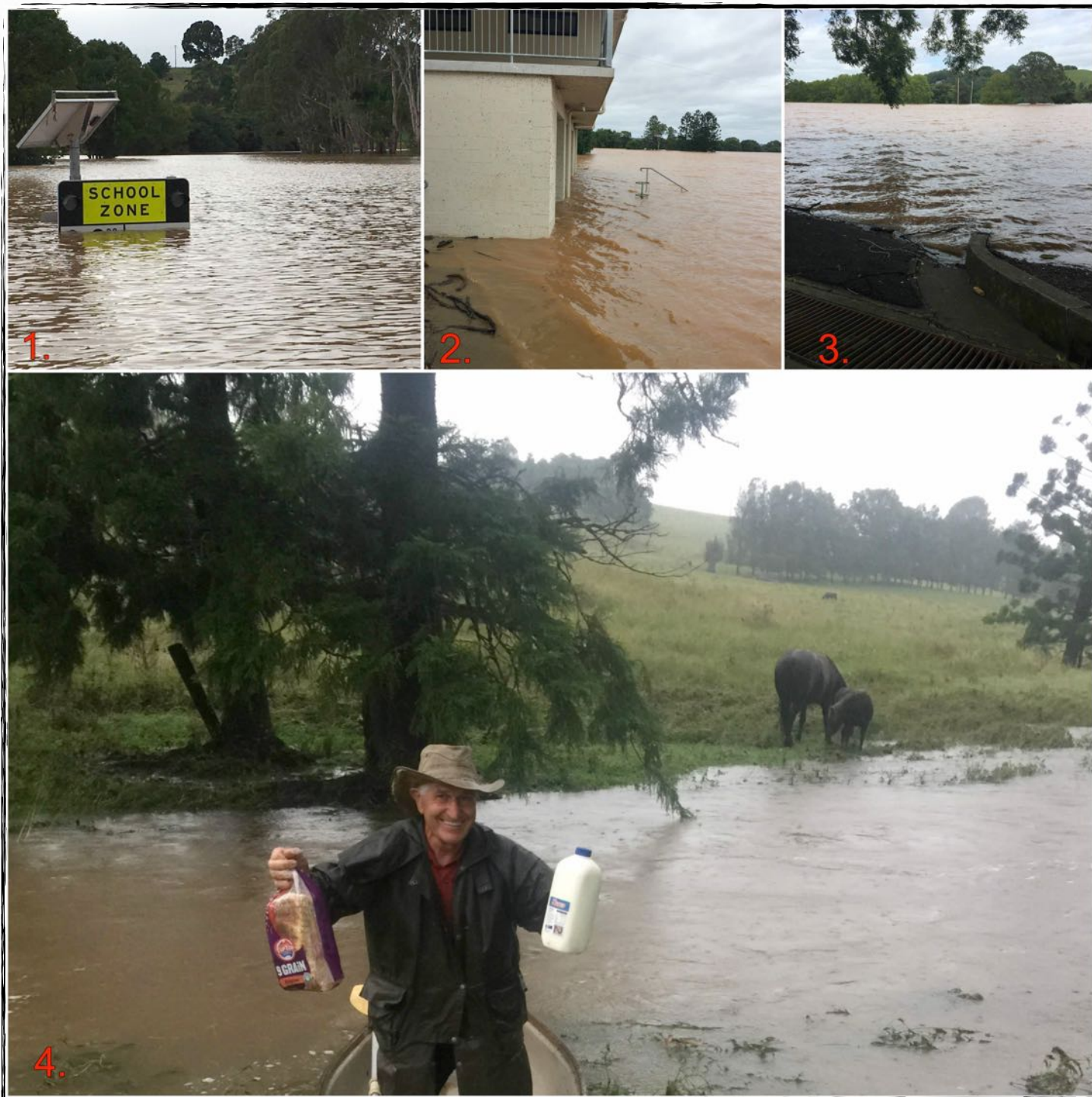


Photo Captions

1. Entrance to St John's
2. Sports store rooms flooded adjacent to the sports ovals.
3. College ovals with the water over the cross bars.
4. Returning Home via canoe, with Bread and Milk after shifting animals at the College and roads being cut due to the rapid rise in flood waters. "Cyclone Debbie" cutting the road and my wife "Debbie" requesting bread and milk!! Life can be tough at times.

Mick Melino (Agriculture Teacher, St John's College Woodlawn)

Western Sydney University Unisteers Beef School

Today, Thursday the 4th May, at Western Sydney University at the Hawkesbury Campus, students from 15 schools participated in a variety of practical and theory activities, and attended the UniSteers Opening Ceremony. Students arrived at the campus at 9am, then were separated into 6 groups, and for the first time, a senior program was introduced for returning students to the program.



Theory activities ranged from in class activities to partially practical activities. Feeding and nutrition of animals was a valuable learning opportunity for students, gaining insight on how cattle should be fed to produce a high-quality animal. Cattle judging was a partial practical activity which involved students gaining knowledge into how cattle are judged as live animals, and

were instructed to perform a small speech to their peers on why which animals had preferable characteristics and for what reason. Students also learnt about fat scoring and why it is essential in creating an excellent quality product.

Practical activities displayed a variety of skills which are essential in the behaviour of both the cattle and handlers. The parading ring created a safe and educational atmosphere, pulling students into a fast-paced learning environment. Taking the halters, students were given advice on how to improve their skills parading animals for the comfort of the animal. Animal welfare and handling gave students the opportunity to handle cattle in a paddock, and students were given further information about moving cattle as well as smaller things such as fences, gates and animal eyesight.

Finally, clipping to form an accentuated body for the animals was a hands-on activity for students. Advice was given about what part of the body structure should be shaped, and how fur should be blow dried to perfect the appearance of the animals.



This year, a senior program was introduced which involved new activities. Components such as pH testing in urine and information about animal health and disease made up part of this program. Excellent health is essential when raising the steers, and there were



a variety of methods demonstrated to the seniors to prevent, detect or treat some diseases. The seniors further honed their theory and practical skills involving cattle.

At last, the official UniSteers Opening Ceremony began. Thanks were given to the amazing teachers who sacrificed their time for us today, and to Western Sydney University. The competition was explained

to all the students and then animal numbers were drawn out of a hat and given to all the schools attending. Shortly after, the cattle were moved onto trailers and taken home for us to raise for the next 100 days!

P Turner (Student of Xavier College On behalf of Participants of the UniSchool's Steer Competition)

Vincentia High School

Sydney Royal Easter Show Outstanding Results from our

Hayden Regent	1st Paraders Stockmanship Opens	1st Paraders Showmanship Opens	Champion
Georgia Matheson-Gee	2nd Paraders Stockmanship Opens	2nd Paraders Showmanship Opens	Senior Trainer Award
Maddie Cooper	3rd Paraders Stockmanship Opens	3rd Paraders Showmanship Opens	
BJ Hawkins	4th Paraders Stockmanship Intermediate Preliminary	3rd Paraders Showmanship Intermediate Preliminary	
Georgina Jones	5th Paraders Stockmanship Intermediate Preliminary	3rd Paraders Showmanship Intermediate Preliminary	
Eden Roszkiewicz	4th Paraders Stockmanship Intermediate Preliminary	Paraders Showmanship Intermediate Preliminary	
Issy Boyes	1st Paraders Stockmanship Preliminary	3rd Paraders Showmanship Preliminary	Champion
Penny Holloway	4th Paraders Stockmanship Preliminary	1st Paraders Showmanship Preliminary	

Alpaca Team and Poultry Team

Vincentia High School excelled at the 2017 Royal Easter Show in Sydney with both the Alpaca Team and the Poultry Team winning the School's Champions Competition. Our Alpaca team consists of Hayden Regent, Maddie Cooper, Georgia Matheson-Gee, B.J. Hawkins, Georgina Jones, Eden Roszkiewicz, Issy Boyes and Penny Holloway. These students give up their weekends and holidays to represent Vincentia High School at the many Rural Shows along with Molly Gill, Charlotte Hilton, Naturelle Mifsud and Amelia Eaton. Because of all of our hard work other Alpaca Studs are asking our students to show their animals in the Show Ring.



Our winning Alpaca Team Glad Worthy cook and first aid, Eden Roszkiewicz, Issy Boyes, Georgia Matheson-Gee, Maddie Cooper, Georgina Jones, BJ Hawkins, Hayden Regent, Penny Holloway, Marion Worthy team leader, Rachael Holloway parent carer and Gary Worthy driver (not in photo).

In the Alpaca Arena our students did very well:

- Supreme Champion Opens Hayden Regent
- Supreme Champion Preliminary Issy Boyes
- Reserve Champion Junior Judging B.J. Hawkins
- 3rd Junior Judging Hayden Regent



Vincentia High School
School Champions
2107 Sydney Royal Easter Show



BJ Hawkins and Hayden Regent
receiving their sashes in the Junior Judging Event



Vincentia High School
Schools Champion Canberra Royal Show



Our curious Alpaca Boys
Kwame, Charles and Lord Lorax
checking out what was going on



Penny Holloway and Issy Boyes
getting ready to present the animals at the Canberra
Show



Vincentia High School students walking the
Alpaca at the Sydney Royal Easter show



Maddy Cooper and Georgia Matheson-Gee competing in the teams
event



Georgina Jones competing in the teams event



Hayden Regent competing in the
Teams event at the Royal Easter Show



Eden Roszkiewicz, Hayden Regent, BJ Hawkins
and **Penny Holloway** competing in the
Junior Judging event



BJ Hawkins competing in the
Junior Judging event



Vincentia High School students helping in
the Junior Judging Competition



Vincentia High School Student's walking the Alpaca
at the Sydney Royal Easter show



Hayden Regent presenting our mature aged Alpaca "Charles" who
gained a 1st and Mature Aged Champion At Canberra Royal Show 2017



2017 Sydney Royal Easter Show Poultry Results

Class 1275 - Soft Feather Heavy Breed any variety Male
 Class 1276 - Soft feather Heavy breed, any variety Female
 Class S5201C - **Champion Soft Feather Heavy Breed Any Variety Winner**
 Class 1282 - Hard Feather any variety Female
 Class S5204C - **Champion Hard Feather Any Variety Winner**
 Class S5205M - **Champion School Classes Bantam Male Winner**
 Class S5205F - **Champion School Classes Bantam Female Winner**
 Class S5205C - **Champion School Classes Bantam Ribbon Winner**
 Class S5205R - **Reserve Champion School Classes Bantam Winner**
 Class 1288 - Duck and variety Drake



Poultry School Classes

Class 107 Indian Runner White Under 12 months Duck
 Class Orpington Buff, Duck
 Poultry Bantam Single Classes Hard Feather
 Class 729 Old English Game Black-Red, Partridge, Dark Leg Hen
 Class 884 Plymouth Rock any other colour Rooster
 Class S4229M - **Best Bantam Plymouth Rock any other Colour Male Winner**
 Class S4229C - **Champion Bantam Plymouth Rock any other colour Winner**
 Class S4230M - **Best Bantam Plymouth Rock Male Winner**



Donna Dean (Vincentia High School)

West Wyalong High School



Winners of Young Judges RAS State Final with Judge Dr T Speck

West Wyalong High's Show Team were beaming and delighted following their Grand Champion fleece win at Sydney Royal this year. The skirted kid fleece won its class 25.1 – 27 micron before taking out the tri-colour ribbon. Although this is not the first time the stud has taken out the coveted prize it was a cherished win over a long time rival.

West Wyalong High students Sarah Morris, Gracelyn Norton, Molly Cattle, Rebecca Morris, Chloe Worner, Brianna Worner, Lilly Spackman, Jayda Stanton and Matthew Kirkby together with Ms Statham travelled with 32 Willow Glen Angoras and 12 mohair fleeces to the Sydney Royal Show in the week leading up to Easter Show.

Our Show Team was indeed fortunate to be supported by former students Andrew Kelleher, Michael Mrowka and Mrs Kirkby who gave up their time to fulfill the roles of mentors, Bus Drivers, First Aid Officers and Chef. Peter Simpson from Chain Gate in Wagga lent us his trailer. WWHS and Willow Glen have over the years, also received support and guidance from Keith Cowen and Yarran Park Angoras. Yarran Park goats (an SRS® stud) are polled, big and robust, double the fibre density and producing fine kid mohair as adults. The genetics from this stud has proved invaluable and was clearly evident in our Production class results.

Willow Glen follows SRS® breeding principals. Mohair from Angora goats sells for premium prices. The mohair is produced by the Angoras at a rate of 0.8 to 1.0 mm per day so require shearing every 6 months. In recent years SRS® Angora breeders have radically changed the physical appearance and fleece structure. The animal can be polled, has early body growth and fibre density as well as fibre length have been markedly increased.

WWHS students competed in Open and Schools classes in both the Mohair Fleeces and Angora goats. Students also competed in Angora Paraders competitions and the RAS State Final of the Angora Goat and Mohair Young Judges Competition.

Willow Glen did very well with a large number of ribbons in the Open Mohair fleece and Angora sections. Results for the **Open Mohair fleece** section were:

2nd & 3rd in the First Shearing Kid

1st & 2nd in the Fine Kid Fleece

1st in the Kid Fleece

2nd & 3rd in the Young Goat Fleece

2nd in the Fine Hair Fleece

1st & 3rd in the 5kg Commercial Kid Mohair

Grand Champion Mohair fleece was awarded to Willow Glen's Kid Mohair fleece.

In the Open Angora classes Willow Glen gained a 3rd placing, six 4th placings and one Highly Commended ribbon.

Willow Glen went on to dominate all placings in the School's competition classes, with:

School's Champion being awarded to – Willow Glen Rahmosteffi

School's Reserve Champion being awarded to – Willow Glen Kirrilshanrivkee

West Wyalong High and Willow Glen are undefeated as School's Champions at Sydney Royal for the past 27 years.

Open Production classes Results:

Under 12 months – Willow Glen 3rd

Over 12 months – Willow Glen 2nd and 3rd

School's Wether Challenge Production Class – 12 months and older WWHS entered 3 teams of wethers and gained 1st, 2nd and 4th

School's Wether Challenge Project – WWHS was placed 3rd against Molong Central and Dubbo South Campus.

School's Wether Herdsman Competition – WWHS was placed 3rd against Dubbo South Campus Teams 1 and 2.

Angora Goat Senior Paraders Competition – Ms Statham was placed 2nd behind Ms Mrowka from Dubbo South Campus but then Ms Statham taught Ms Mrowka!

Angora Goat Youth Paraders Competition – Chloe Worner was awarded a Highly Commended

Angora Goat Junior Paraders Competition – 1st Jayda Stanton, 3rd Matthew Kirkby

Angora Wether Challenge Paraders Competition – 2nd Chloe Worner, very creditable 5th Jayda Stanton, Highly Commended Angel Coe and Gracelyn Norton

This competition had over 40 entrants from Dubbo South Campus, Molong Central, Queanbeyan High and West Wyalong High.

RAS STATE FINAL of the Angora Goat and Mohair YOUNG JUDGES Competition:

Reserve State Champion – Molly Cattle,

Molly was Reserve State Champion last year as well and now heads to the National Final of the Angora Goat and Mohair Competition to be held in Adelaide at the Adelaide Royal Show in September of this year.

Willow Glen and West Wyalong High are looking forward to our next show - the Australian Sheep and Wool Show at Bendigo Victoria next July.

Amanda Statham (Agriculture/Science Teacher, West Wyalong High School)




IDENTIFY YOUR SOIL TYPE

the jar test

- 1 Fill a clear glass jar halfway with your soil sample.
- 2 Fill the remaining half with water, leaving 1" of air.
- 3 Attach lid, then shake the jar vigorously until you have broken up any clumps of soil.
- 4 Set the jar aside to rest, undisturbed, overnight.

After 24 hours your jar's contents will have settled into distinct layers:

SAND	SILT	CLAY
By examining the proportions of these layers, you can gain a sense of what type of soil you have, and what you need to add to improve your soil. Here are some examples to use for comparison. The middle jar is ideal soil:		



25% clay
25% silt
50% sand

30% clay
40% silt
30% sand

50% clay
25% silt
25% sand

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In the News - Colo High School

Hawkesbury GAZETTE

Tuesday June 27, 2017

Poultry, pigs, pumpkins and cattle: Colo's Royal entries

Sarah Falsion

7 Apr 2017, 3:30 p.m.



SUCCESS: The Colo team performed well at the Castle Hill Show, which allowed them to go on to compete in a state level at the Sydney Royal Easter Show.

IF you're heading to the Royal Easter Show, make sure you don't miss a little slice of the Hawkesbury in the agricultural section.

The student-teacher team from Colo High School will be showcasing both animals and vegetables.

"We have lots of poultry in the poultry pavillion over the whole show period. Also we have pigs in the pig pavillion until Sunday," said Luciano Mesiti, agriculture teacher at the school.

"There is a prize-winning pumpkin in the garden pavillion. On Tuesday morning we have a student in the state beef cattle judging final on the cattle lawns."



Some of Colo's birds pictured at the Castle Hill Show. They will also be on display at the Sydney Royal Easter Show.

The team recently returned from a successful Castle Hill Show, where they participated in the Youth Expo. Here, they qualified for the Royal Easter Show state final competitions.

“Colo High did very well in the cattle judging competition, with first place in junior judging (Joshua Vella) and second in senior judging (Beth Simmonds). Beth qualified to compete in the state beef cattle judging competition at the Sydney Royal Easter Show,” said Mr Mesiti.

“Our cattle paraders and heifer placed well in their competitions. On the poultry front, most of the birds entered in the poultry competition received a first or second place in the show.

“Colo High is a Lighthouse School of Agriculture, which is something the Department of Education has bestowed upon us as a school of excellence in Agricultural teaching.”

The Sydney Royal Easter Show is at Sydney Olympic Park until Wednesday, April 19.

The Colo team will also be showcasing their work at the Hawkesbury Show in May.



Check out NSWAAAT facebook page for some great captions for this photo.

In the News - West Wyalong High School

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THE SYDNEY ROYAL

SMART FARMER

THE KNOWLEDGE BANK



Jessie Davies

10 Apr 2017, 5 p.m.

Sydney Royal

@jessie_davies



Judge Trey Speck with the grand champion mohair fleece belonging to Willow Glen Angoras, West Wyalong.

WEST Wyalong High School students are beaming this afternoon following their huge win in the Sydney Royal's School's Angora Competition.

The school, which runs the Willow Glen Angora goat stud, were awarded grand champion mohair fleece for their entry 'fleece one'.

The skirted young kid fleece won its 25.1 micron to 27 micron class before taking the tri-colour ribbon.

Judge Trey Speck, all the way from Galveston, Texas, US, said the quality line up of champions made for "extremely difficult" judging.

"In the end it came down to preference. I favour uniformity and style. This here is a very valuable fleece," Mr Speck said.

The school also picked up first place in the class for 25 micron and under. They also came first in the five kilogram commercial skirted kid mohair class.

The reserve champion mohair fleece was awarded to Cullbookie Angora Goat Stud, owned by Debbie Scattergood, Bungendore.

Ms Scattergood's fleece, 'fleece one', had earlier placed second in the skirted young kid fleece, 25.1 micron to 27 micron, class.

A Cullbookie entry also won the first class of the day, the first shear kid fleece. The judge awarded it first place due to its "exceptional softness". Another of the stud's fleeces picked up gold for the 27.1 to 29.5 micron class while another won the 32.1 micron and over class.

The Gorrie family's Dulark Angora stud won the 29.6 to 32 micron class.

Trey Speck's family have been farming Angora goats in Texas since the early 1900s. He came to Australia in 2002 to judge the national mohair competition.

Mr Speck judged the fleeces on their style (curl), character (crimp), lustre and weight.



Blazeaid Cassilis



The Yr 12 Primary Industry students of Manilla Central School (Kurt, Drew, Emily, Hayden, Rebecca, Chelsie and Emily) attended a voluntary run Blazeaid camp last week, helping those farmers affected by the Sir Ivan fire, stretching over 160 thousand acres around the Cassilis region. On arrival, I was told the average age of the volunteers was 63. The students were introduced to the community of volunteers with a very warm welcome, dramatically lowering that average age. Later that night we setup camp at Cassilis public school out of the blistering cold weather.

Each morning, the students were woken at 6am, packed up all their gear (bags and swags) and were transported to the Blazeaid camp for breakfast and the morning muster whereby the plans for the day's work would be distributed to the small teams. After breakfast, the students would make their own lunches, pack it in the esky, load the trailer and head off to the respective farms.

Our two teams focused on helping two farmers, Dan and Paul. All of Dan's external and internal fencing had been destroyed by the fire however he was very lucky as he managed to save all his livestock. Paul also lost a huge amount of fencing and some livestock in the fire.

Essentially, our job was to physically rebuild fences, however our secondary and possibly more important job was to rebuild hope. A lot of these farmers and community members were suffering some degree of depression due to their losses. We would work hand in hand with the farmer, removing the old fence and erecting the new, while all the time, interacting with the farmer, asking questions, making conversation and generally being there for those affected.

Some of our jobs included;

- ï Removing the old fence (utilising a frontend loader, post lifters), rolling the old fence, pickets and wire and lifting out the old strainers and stays.
- ï Install new strainers and stays at either end of the fence
- ï Run the top barb out to give us a straight line
- ï Drive in new star pickets with the powered driver (some of the great gear in these Blazaid trailers)
- ï Run the following barb and 3 plain wires (top, belly and bottom)
- ï Roll out hinge joint
- ï Tie off and strain all the wires, then clip hinge joint onto plain wires.
- ï Hang gate off strainers

Working hand in hand with the farmer on the ground was a symbiotic relationship. As I explained to the farmer, yes we are helping him re-establish a working farm, but he is also helping us by providing the opportunity and materials for our students to practice their competencies for their VET course (Primary Industries). Later in the afternoon, around 4 or

5pm, we would have a chat and a soft drink at the farmer's house, whereby we would debrief about the day's work, work out what we need to do tomorrow and generally chat about the kids future... What they want to do after school, how they plan to do it and what help they might need.

Each night we would head back to the Blazeaid camp, sharing a prepared meal with the other volunteers, interacting with those around us and the local community. Then around 9pm, back to the school for a rest.

Over the period of time, our senior students built a relationship with the younger Cassilis primary students, forming many friendships. On the Thursday, we decided to stay awhile at the school, and help the kids train for an upcoming touch footy competition. The kids had a game together for an hour, then pairing off to read a book to each other for 20minutes. We later did some spelling and math in the quad before we departed back towards Manilla.

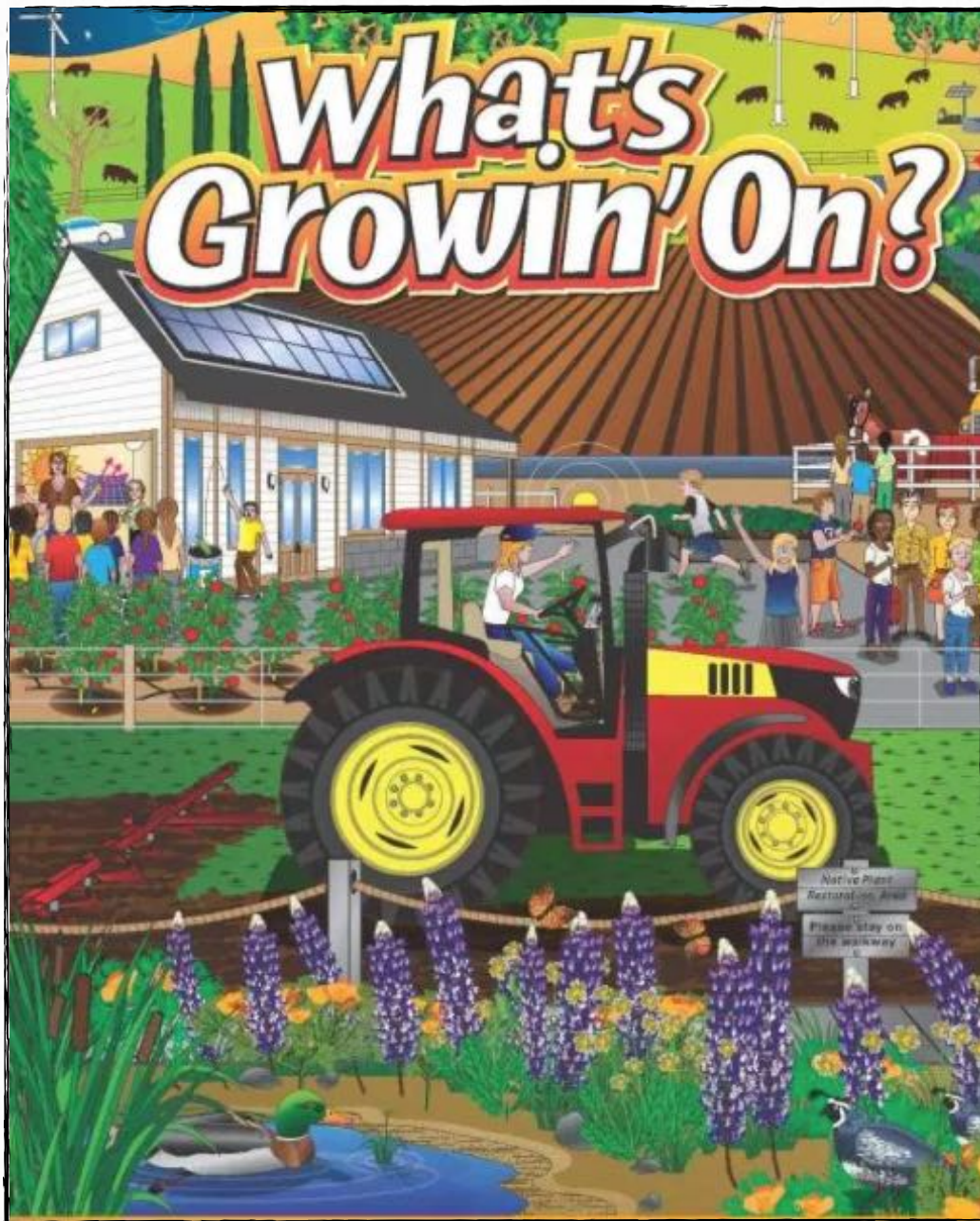
Throughout the week the students really bonded with the volunteers and farmers. Several student opportunities were formed, ranging from work experience, to permanent employment next year and or mentoring opportunities with regards to tertiary learning opportunities. A fantastic result for our students, school and the Blazeaid organisation along with local farmers. This excursion complimented and enhanced our students learning throughout the VET Primary Industries curriculum; via competencies learnt onsite and experiences shared with regards to responding to emergency situations (syllabus dots points). A brilliant symbiotic opportunity between student, school and community.

Justin Connors (Agriculture & Primary Industries Teacher, Manilla Central School)

6

What's On?

Do you know of an upcoming Ag event. Please email details to baat.editor@gmail.com.





Royal Agricultural Society of NSW > Events > AgVision 2017

AgVision 2017

2015 AgVision Student
Booklet*

2015 AgVision Highlights

AgVision is a leading Agricultural and Agribusiness careers expo in NSW dedicated to supporting and informing years 9-11 students and their educators of the range of careers available in agriculture, science, technologies and agribusiness. Students will be inspired and motivated by the hands on experiences and mentoring from industry professionals. In 2017 AgVision returns to Sydney Showground, hosted by the Royal Agricultural Society of NSW.

In 2017, AgVision registration will occur in two stages.

Stage 1 – [Teacher Registrations now open](#)

Teachers register themselves and approximate numbers of students attending. This allows us to capture school information for the purpose of billing in stage 2.

Please read the [Pre-Excursion Pack](#) for all AgVision details.

Stage 2 – [Student Registration now open](#)

- Students will register individually via the link above (NOT teachers).
- Students will select 6 personal preferences for workshops.
- Students will select their school for billing purposes.

Please view the [AgVision 2017 Workshop Descriptions](#) to assist with your selection.

***Please note that the booklet found above is a sample from 2015, and illustrates what to expect for this years event booklet.**

When

Thursday, 27 July 2017

Where

Sydney Showground, Sydney
Olympic Park

Price

\$15 per student



Department of
Primary Industries



SCIENCE WEEK AT TOCAL

how is science
helping us
farm for a
future earth?



Thursday
17 August 2017

Tocal
COLLEGE
RTO 91166

Youth
EDUCATION

Adult
EDUCATION

Industry
SERVICES

Publications
BOOKS | EBOOKS

YOUR FUTURE IN AGRICULTURE

SCIENCE WEEK AT TOCAL



We invite you and your students to a day of interactive workshops designed to address the **Living World** outcomes of the Science syllabus.

The workshops include soils, water, bugs and technology as well as a spatial technology demonstration and a Q&A session about the future of farming.

Date: Thursday 17 August

Times: 9.30 am to 2.30pm

Location: Tocal Homestead

Cost: \$15 per student

Places are limited, book in now

Bookings: 4939 8822 or jo.hathway@dpi.nsw.gov.au





Show Dates



Date	Show	Show	Show
August 2017			
11th - 12th August	Tullamore Show		
12th - 13th August	Mungindi Show		
15-16th August	Trundle Show		
19th August	Bedgerabong Show	Ganmain Show	
20th August	Weethalle Show		
22nd - 23rd August	Peak Hill Show		
25th - 26th August	Condobolin Show		
26th August	Barellan Show		
26th - 27th August	Penrith Show	Wentworth Show	
28th - 30th August	Parkes Show		
September 2017			
1st - 2nd September	Narromine Show	Grenfell Show	
2nd September	Lake Cargelligo Show	Manildra Show	Narrandera Show
2nd - 3rd September	Barmedman Show		
3rd September	Woodstock Show	Finley Show	
5th - 6th September	West Wyalong Show		
8th - 9th September	Murrumburrah Harden Show	Forbes Show	Wagga Wagga Show
9th - 10th September	Quirindi Show	Hay Show	
10th September	Ariah Park Show	Cudal Show	Wyong Show
15th - 16th September	Eugowra Show		
15th - 17th September	Merriwa Show		
16th September	Ardlethan Show		
17th September	Woodenbong Show	Molong Show	Young Show
22nd - 23rd September	Canowindra Show	Singleton Show	
22nd - 24th September	Singleton Show		
23rd - 24th September	Menangle Park Show	Nimbin Show	
23rd September	Hillston Show		
24th September	Lockhart Show		
30th September	Culcairn Show	Bribbaree Show	

Date	Show	Show	Show	Show
October 2017				
1st October	Berrigan Show	Griffith Show		
2nd October	Morongla Show	Walbundrie Show		
6th - 7th October	Kyogle Show			
6th - 8th October	Taree Show			
8th October	Corowa Show			
9th October	Norfolk Island Royal Show			
13th - 14th October	Leeton Show	Casino Show		
14th October	Illabo Show	Trunkey Creek Show		
14th - 15th October	Cowra Show	Camden Haven Show		
19th - 21st October	Lismore Show			
20th - 21st October	Barham Koondrook Show			
21st October	Tooraweenah Show	Cootamundra Show	Dapto Show	The Rock Show
27th - 28th October	Alstonville Show			
28th October	Junee Show	Carcoar Show		
November 2017				
3rd - 4th November	Murwillumbah Show	Albury Show		
4th November	Frenchs Forest Show			
5th November	Minto Show			
10th - 11th November	Dungog Show			
11th - 12th November	Mullumbimby Show	Queenbeyan Show		
11th November	Holbrook Show			
17th - 18th November	Bulahdelah Show	Bangalow Show		
18th November	Neville Show			
25th - 26th November	Dorrigo Show			

7 Members of NSWAAAT @ 24.6.2017

Financial to end of	First Name	Surname	Location
2017	Susan	ADAM	Northern Beaches Christian School
2019	Bryon	ADAMSON	Corowa High School
2017	Melinda	ADDERLEY	Granville Boys High School
2017	Asifo	AJUYAH	Picton High School
2017	Danielle	ALEXANDER	Xavier College, Llandilo
2017	Lauren	AMOR	St John's College
2018	Philip	ARMOUR	Yass High School
2017	Robbie	ASHHURST	James Ruse Agricultural High School
2017	Catherine	ATKINS	Northmead CAPA High School
2017	Megan	ATKINSON	Elderslie High School
2018	Sunrae	BAILLIE	Great Lakes College, Forster Campus
2018	Annie	BALDWIN	Singleton High School
2017	Dianna	BEALE	Tumut High School
2017	Romy	BENNETT	St Paul's College
2018	Carol	BLACKWOOD	James Sheahan Catholic High School
2017	Erin	BLAKE	Hurlstone Agricultural High School
2017	(William) David	BLOWES	Molong Central School
2017	Craig	BOURNE	Singleton High School
2017	Ben	BOWMAN	Peel High School
2017	Graham	BRAMLEY	St Paul's College
2017	Cathy	BREENE	Oakhill College
2017	Deborah	BUNN	Galston High School
2017	Lynda	BUTTSWORTH	Jamison High School
2018	Jennifer	CAINES	Mount Annan Christian College
2018	Samara	CALLAGHAN	Tomaree High School
2018	Brianna	CALLUM	Barker College
2017	Paul	CANNINGS	Pittwater High School
2017	James	CAUGHEY	Hay War Memorial High School
2017	Dale	CHADWICK	Gundagai High School
2018	Carl	CHIRGWIN	Griffith High School
2018	Geoffrey	CLERKE	Caroline Chisholm College
2017	Stephanie	COLGAN	Dubbo College Senior Campus
2017	Louise	COLLINS	Uralla Central School
2017	Luke	COLLINS	Yanco Agricultural High School
2018	Angela	COLLIVER	Angela Colliver Consulting Services
2018	Justin	CONNORS	Manilla Central School
2017	Ben	COOMBES	Peel High School
2017	Elena	DAGHER	Bossley Park High School
2017	Eric	DATE	Crestwood High School
2018	Erika	DAYAGANON	Hurlstone Agricultural High School

Financial to end of	First Name	Surname	Location
2017	Donna	DEAN	Vincentia High School
2018	Ewan	DENNIS-SMITHER	Oakhill College
2017	Kathy	DOMAN	Kyogle High School
2017	Alice	DORMAN	Trangie Central School
2017	Christine	DUVER	Woolgoolga High School
2018	Nicole	DWYER	Gunnedah High School
2017	Susan	EARL	Red Bend Catholic College
2017	Anne	EARNEY	Condobolin High School
2017	Samuel	EVANGELINOS	Cotton Australia
2018	Sarah	EYB	James Sheahan Catholic High School
2017	Guy	FAHEY	Albury High School
2017	Michelle	FIFIELD	NSW Department of Primary Industries
2017	Rob	FORSBERG	St Joseph's College
2017	Sarah	FOSTER	Dubbo Senior College Campus
2018	Ann	FRIZELL	Barham High School
2017	Teacher of Agriculture	GETT, Verity	Wee Waa High School
2017	David	GIBLIN	Chifley College, Bidwill Campus
2017	Scott	GRAHAM	Barker College
2017	Amy	GREENWOOD	Henry Kendall High School
2018	Lara	GRIFFIN	Pittwater High School
2017	Susan	GROTH	Galston High School
2017	Belinda	HAIGH	Dubbo School of Distance Education
2017	Leonie	HARRIS	Frensham
2017	Adrian	HARRISON	St Gregory's College
2017	Teacher of Agriculture	HAWKINS, John	Wingham High School
2017	Colin	HAWTHORN	Red Bend Catholic College
2018	Stuart	HEMMINGS	dotEdu Consulting
2017	Tanya	HENRY	Irrawang High School
2017	Teacher of Agriculture	HERWIG Kate	Lisarow High School
2018	Briony	HODGES	Nepean CAPA High School
2017	Michael	HOLLAND	Scone Grammar School
2017	Janet	HOLMES	Mulwaree High School
2017	Teacher of Agriculture	HORLEY, Ken	Yeoval Central School
2018	Kristina	HOTSON	Camden High School
2019	Peter	HUMPHRIES	Deniliquin High School
2017	Jane	HUNTER	Camden High School
2017	Maqsood	IQBAL	St Johns Park High School
2017	Tara-Jane	IRELAND	Lake Cargelligo Central School
2017	Rachel	JACKSON	Ungarie Central School
2018	Charlie	JAMES	Singleton High School

Financial to end of	First Name	Surname	Location
2017	Tara	JANE	CSU Student
2018	Samantha	JARRETT	Mount View High School
2017	Claire	JOHNSON	CSU Student
2017	Jacquie	JOHNSON	North Coast TAFE, Maclean
2018	Jarrold	KELLY	Denison College-Kelso High Campus
2017	Paul	KENDAL	Lisarow High School
2017	John	KILLEEN	Bossley Park High School
2017	Adela	KING	Gawler and District College
2017	Ilka	KLEPPER	Cootamundra High School
2017	Teacher of Agriculture	LAIDLAW, John	Mudgee High School
2018	John	LEHMAN	Yolla District High School
2018	Stephan	LEHMAN	South Grafton High School
2017	Veronica	LONGRIDGE	Chifley College, Dunheved Campus
2017	Steve	MAGINNITY	Alstonville High School
2018	Hayley	MAHONEY	Chevalier College
2018	Teacher of Agriculture	MARITA, Sofia	Kingswood High School
2017	Melissa	MARSHALL	Moruya High School
2017	Diana	MARTIN	Murwillumbah High School
2017	Clare	MATHIASON	RuralBiz Training
2018	James	McDONALD	Yass High School
2017	Alison	McGEARY	Evans River K-12 School
2017	Michael	McGUIGGAN	St Gregory's College
2017	Jo	McHUGH	McCarthy Catholic College
2017	Jacqueline	McINTOSH	Crookwell High School
2017	Leigh	McLEAN	Portland Central School
2017	Simone	McNEILL	Moss Vale High School
2017	Mick	MELINO	St Johns College
2017	Luciano	MESITI	Colo High School
2017	Beth	MIDDLETON	Richmond High School
2017	Christina	MIKAN	St Ignatius' College, Riverview
2017	Heidi	MITCHELL	Tamworth High School
2017	Amanda	MOORE	McCarthy Catholic College
2018	Katrina	MORAN	Oakhill College
2017	Sarah	MOSLEY	RuralBiz Training
2018	Simone	NEVILLE	Tuggerah Lakes Sec. College - Berkeley Vale
2017	Eugenia	O'BRIEN	University of Sydney
2017	Erin	O'NEILL	Lake Cargelligo Central School
2017	Lucy	OSSINGTON	Quakers Hill High School
2018	Kylie	PARKER	Canowindra High School
2017	Evan	PAUL	Hawkesbury High School

Financial to end of	First Name	Surname	Location
2017	Trish	PEARCE	Trinity Anglican College
2017	Justine	PHILLIPS	Xavier College, Llandilo
2017	Kirsty	PIONTEK	Jindabyne Central School
2017	Kathleen	PLATTS	Bega High School
2017	Georgina	PRICE	Parkes High School
2017	Graham	QUINTAL	Retired
2017	David	RANDALL	Retired
2017	Melissa	READY	Menai High School
2017	Elizabeth	RUIS	Windsor High School
2017	Peter	RYAN	Nowra High School
2017	Dani	SAXON	Cranebrook High School
2017	Natasha	SHANKELTON	Tullamore Central School
2018	Adam	SHARP	Bass High School
2018	Warwick	SHAW	Woodenbong Central School
2017	Kara	SHERWOOD	Canowindra High School
2017	Nadine	SIBBALD	McCarthy Catholic College
2017	Nicole	SIMMONS	Warialda High School
2018	Leanne	SJOLLEMA	WA College of Agriculture
2017	Nicholas	SKEVINGTON	Muirfield High School
2017	Sue	SMEDLEY	Wagga Wagga Christian College
2018	Geoff	SMITH	Oakhill College
2017	Jade	SMITH	Goulburn High School
2017	Rachel	SMITH	Trinity Catholic College
2018	Deb	SNAITH	Macintyre High School
2018	Emma	SOALL	James Fallon High School
2018	Laura	SOUTHWELL	Canberra Grammar School
2017	James	STANTON-COOKE	Pennant Hills High School
2017	Carmen	STASSEN	UNE Student
2017	Amanda	STATHAM	West Wyalong High School
2017	Stuart	STOUT	Leeton High School
2017	Sarah	STREETER	Charles Sturt University (Student)
2017	Laura	TANDY	Red Bend Catholic College
2018	Laura	TOLLEY	Farrer Memorial Agricultural High School
2018	Dianne	TOYNTON	Broken Hill High School
2017	Brian	TRENCH	Camden Park Environmental Education Centre
2017	Katie	TWOMEY	James Ruse Agricultural High School
2018	Sky	VAN DEN BERGE	Marian Catholic College, Kenthurst
2017	Jane	WALKER	Chatham High School
2017	Dean	WARD	Seven Hills High School
2017	Gary	WEBB	Finley High School

Financial to end of	First Name	Surname	Location
2017	Nicolet	WESTERHOF	Elizabeth Macarthur High School
2018	Sarah	WESTERWAY	Ulladulla High School
2017	Wayne	WHALE	St Paul's College
2017	Kimberley	WHITE	Kandos High School
2018	Melissa	WILLCOCKS	Inverell High School
2018	Maurice	WOODMAN	Murray High School
2017	Jennifer	WOODWARD	Byron Bay High School
2018	Beth	WORTHY	Sapphire Coast Anglican College
2017	Jan	YOUNG	Murrumburrah High School
2017	Nathan	ZINGA	Kinross Wolaroi School

Life Members

First Name	Last Name
Ian	BAIRD
Tony	BARNETT
Don	BARTHOLOMEW
Lisle	BROWN
Tony	BUTLER
Peter	CRICK
Rod	FRANCIS
Ivan	GANT
Bob	GUEST
Graeme	HARRIS

First Name	Last Name
Phil	HURST
Peter	JONES
Arthur	KELLY
John	LEE
Robyn	O'LEARY
Graham	QUINTAL
Gail	ROBERTS
Norm	ROBINSON
Trevor	SEWELL
Jenni	WILKINS

Associate Membership

First Name	Last Name	Job Title/Organisation
Sally	BANNERMAN	SACEC, STEAM Leader, Secondary Curriculum DoE
Dan	RYTMEISTER	TAS Advisor, Secondary Education DoE
Mark	TYLER	TAS Inspector NESA
NSW	ROYAL AGRICULTURAL SOCIETY	Sydney Olympic Park
Cameron	ARCHER	Chairperson PIEFA
Ben	STOCKWIN	CEO PIEFA
Kelly	SPENCE	Education Officer PIEFA

Affiliate Membership – (NAAE)

First Name	Last Name	Job Title/Organisation
Alysia	KEPERT	Agriculture Curriculum Consultant (WA)
John	LEHMAN	Yolla District High School (TAS)
Hayward	PAYNTER	Walkerie High School (SA)

Membership Application



ABN: 81 639 285 642

TITLE			NAME			
INSTITUTION						
POSTAL ADDRESS						
					Postcode	
EMAIL						
PHONE				FAX		
MOBILE				DATE		
MEMBERSHIP	Work		Individual		Payment Method	

Email this Membership form to: treasurer.nswaat@gmail.com and make cheques payable to: **NSW Association of Agriculture Teachers** (not NSWAAAT).

Post cheque to: **OR**

Treasurer NSWAAAT
Graham Quintal
16 Finlay Ave
BEECROFT
NSW 2119

Pay via Direct Deposit:

Account Name: NSW Association of Agriculture Teachers
BSB: 082 939
Account Number: 639 757 522
Reference: Your Initial, Surname and "Memb".

MEMBERSHIP FEE: \$60 / annum (\$30 for students / trainees)

MEMBERSHIP REQUESTED	No of Years	
PAYMENT \$		

* Membership is based on a calendar year.

(\$5.00 of your NSWAAAT membership is paid annually to the National Association of Agricultural Educators (NAAE) for affiliate membership to the national body.) (\$10.00 of your NSWAAAT membership is paid annually to the Professional Teachers Council of NSW (PTC) which validates our Professional Development Activities.)

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Date Received		Receipt #		Receipt Sent	
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The NSW Association of Agriculture Teachers is NOT registered to collect GST



Thank you to the following people for their contribution to this edition of BAAT

- ★ Danielle Alexander (Xavier College)
- ★ Robbie Ashhurst (James Ruse Agricultural High School)
- ★ Jenny Caines (Mount Annan Christian School)
- ★ Carl Chirgwin (Griffith High School)
- ★ Angela Colliver
- ★ Justin Connors (Manilla Central School)
- ★ Donna Dean (Vincentia High School)
- ★ Susan Earl (Redbend Catholic College)
- ★ Michelle Fifield (DPI)
- ★ Jarrod Kelly (Kelso High School)
- ★ John Killeen (Bossley Park High School)
- ★ Hayley Mahoney (Chevalier College)
- ★ Mick Melino (St John's College, Woodlawn)
- ★ Luciano Mesiti (Colo High School)
- ★ Justine Phillips (Xavier College)
- ★ Graham Quintal
- ★ David Randall
- ★ Deb Snaith (Macintyre High School)
- ★ Amanda Statham (West Wyalong High School)
- ★ P Turner (Xavier College Student)