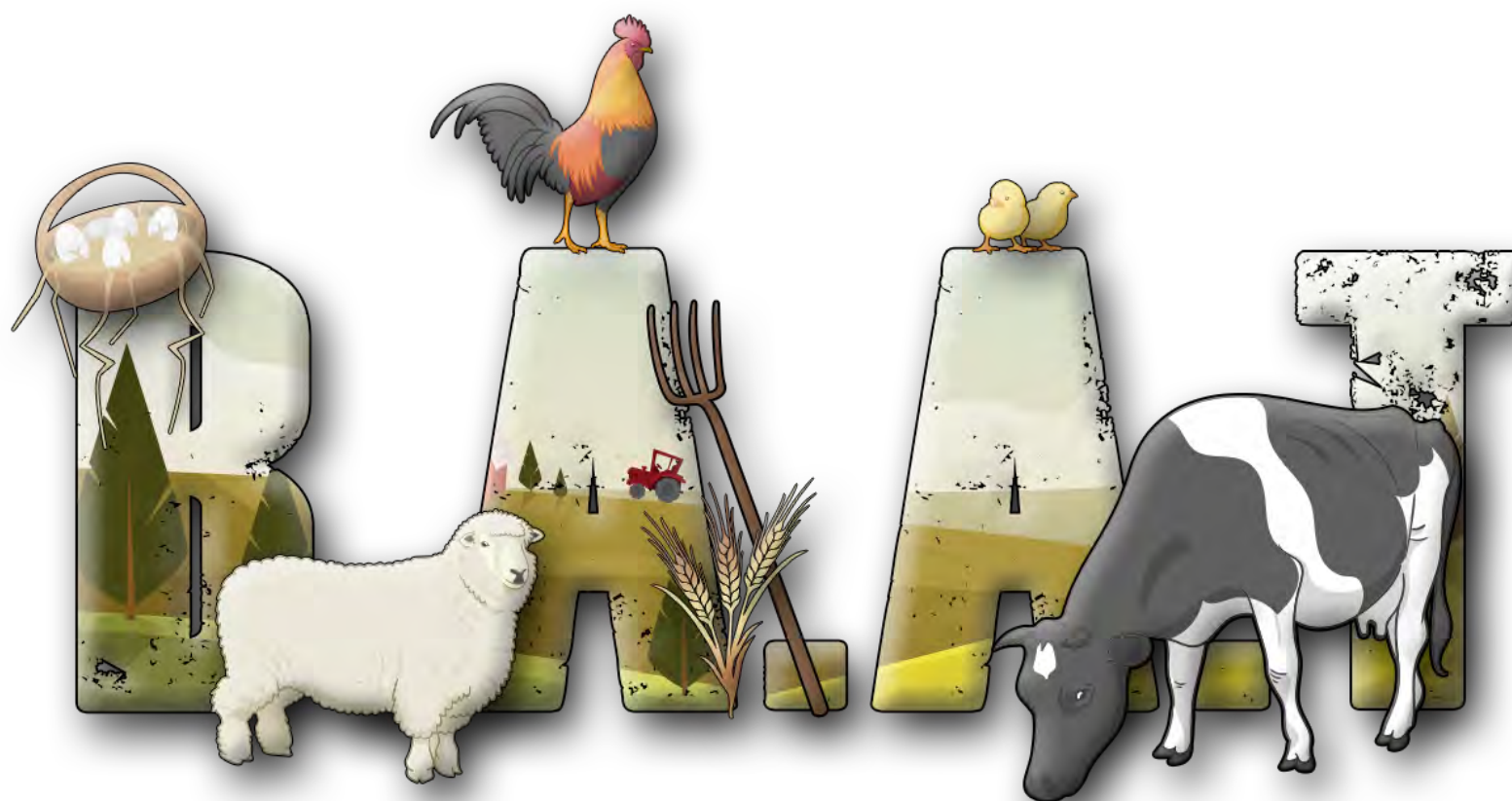


Autumn Edition – No. 54, 2017.



Bulletin of the NSW Association of Agriculture Teachers



New Committee: l to r - John Killeen, Sky Van den Berge, Georgie Price, Jennifer Caines, Kristina Hotson, Lara Griffin, Luciano Mesiti, Graham Quintal, Carl Chirgwin

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N.S.W. Association of Agriculture Teachers Inc

Website - <http://www.nswaat.org.au>

ABN: 81 639 285 642

President Luciano Mesiti Colo High School 218 Bells Line of Road, North Richmond NSW 2754 p) 02 45 712011 e) president.nswaat@gmail.com	Vice President Jennifer Caines Mount Annan Christian College 347 Narellan Road Mount Annan NSW 2567 p) 02 4634 7474 e) jennifer@macc.nsw.edu.au	Secretary Vacant e) secretary.nswaat1@gmail.com
Treasurer Graham Quintal 16 Finlay Avenue, Beecroft NSW 2119 p) 0422 061 477 e) treasurer.nswaat@gmail.com	BAAT Editor Sky Van den Berge Marian Catholic College 28 Annangrove Road, Kenthurst NSW 2156 p) 02 9654 6700 e) baat.editor@gmail.com	BAAT Assistant Robbie Ashhurst James Ruse Agricultural High School 17-31 Felton Road, Carlingford NSW 2118 p) 02 9871 7126 e)robbie.ashhurst@det.nsw.edu.au
Technology and Communication		
Website Lara Griffin Pittwater High School Mona Street Monavale NSW 2103 p) 02 9999 4035 e) lara.griffin@det.nsw.edu.au	Assistant Evan Paul Hawkesbury High School 1 Hibberts Lane Freemans Reach NSW 2756 p) 02 45796800 e) evan.paul@det.nsw.edu.au	Edmodo Phil Amour Yass High School Grampian Street, Yass NSW 2582 p) 02 6226 1711 e) philip,amour@det.nsw.edu.au
NSWAAT Facebook Group Administration		
Graham Quintal e) treasurer.nswaat@gmail.com	Carl Chirgwin e) secretary.nswaat1@gmail.com	Georgina Price e) georgina.bolam1@det.nsw.edu.au
State Agricultural Advisory Group		Public Officer
John Killeen Bossley Park High School 36-44 Prairie Vale Rd Bossley Park NSW 2176 p) 02 9823 1033 e) john.killeen1@det.nsw.edu.au	Kristina Hotson Camden High School 300 Cawdor Road, Camden NSW 2570 p) 02 4655 9191 e) kristina.hotson@det.nsw.edu.au	Ivan Gant e) ivan.gant@det.nsw.edu.au

Meet President Luciano Mesiti

To new teachers..... You hold the key to inspiring our future agricultural leaders - be passionate about Ag and have courage to continue your very hard work!



Teaching at..... High School - 7 years, University - 17 years

Previous Career..... University lecturer, Animal Health & Environmental Researcher, Quarantine Officer, Musician

Schools..... Plumpton High & Colo High (current)

Hobbies.... Cooking, gardening, breeding chooks & performing music

2

Reports



"Teach your students how to smoke (seeds)", Angus Stewart.
Wise words from Angus's Farming on the Fringe conference presentation.



Presidents Report

Luciano Mesiti

Prez Chat

Welcome to our first BAAT for 2017! This year started out extremely busy with our conference and election of new executive, including myself as your new president. Thank you to everyone's support and guidance in my first few months. I'm looking forward to working with you and support your efforts across NSW.

The NSWAAAT biennial conference held in January in Sydney was a great success, with over 80 delegates attending, 4 days of action packed sessions and tours, the best food that Sydney can offer, incredibly generous sponsors, fantastic harbour cruise, informative guest speakers and an exhausted organizing committee! Thank you to our members who attended. Certainly from the survey feedback, there were many very positive comments and we as a committee are grateful to everyone who assisted in the success of this event. If you haven't received your BOSTES/NESA conference hours accredited to you, please let me know.

NSWAAT is supporting a fund raising event for a very good cause. The Sir Ivan bushfire that devastated the region near Dunedoo and Cassilis in early February saw livelihoods and farmland decimated. This fund raiser is to support the purchase of fencing materials, with the labour provided by students and teachers from around the state. This event is being led by Farrer Memorial High School, and the Department of Education, working with BlazeAid and coordinated by Graham Harris and Ivan Gant. More information will be forthcoming on how schools can get involved.

We are planning to update the NSWAAAT website very soon with a new look and updated links and resources. If you have anything you would like to see added to the site, please let me know. Also, the constitution will be updated to include retired teachers in the membership categories and we are working on a fee structure for schools that have multiple teachers.

We encourage teachers to meet each term in their regions. In the past, regional sub branches were more active than now. We would like to assist regional teachers to get together more often. If you would like assistance in contacting the members in your region to make something happen, we can assist. Also, if you are currently holding a meeting in your region, please advertise it on Facebook and send an summary and photos so we can add it to BAAT.

We as Ag teachers face a very unique situation in schools. Our challenges might seem insurmountable at times. But through the support of agriculture teachers who share a common bond through our association, you keep making a huge difference to agricultural education. I'm continually amazed by the professionalism of Ag teachers, who come together and share their knowledge and wisdom and work fluidly as a team in any given situation.

Our association plays a very important role in being a voice for its members and for agricultural education. I appreciate your continued support of the association and please encourage all teachers to become a member. I also encourage you to communicate with the association about issues either on Facebook or via email.

Have a great rest of term and good luck during the show season.

Luciano

Conference Report



Conference Title	The nineteenth NSWAAAT Association of agriculture Teachers biennial conference – “ Farming on the Fringe ”
Venue	The Lodge, Homebush Sydney and The Stables’-NSW Royal Agricultural Society
Date	Sunday 8 January 2017 – Thursday 12 January 2017
Number of delegates	83
Skill Set of delegates	Teachers, researchers, Marketing experts, people working in the agricultural industry and agribusiness professionals.
Total hours	This conference provided a total of 29 hours of professional development at proficient teacher level.

SUMMARY

Day 1 8/01/2017	<ul style="list-style-type: none"> • Registration • Research work - the use of robotics and its possible application in the field of Agriculture by ... of ACFR • Dinner
Day 2 9/01/2017	<ul style="list-style-type: none"> • Visit to Flemington Markets • Workshops (three sessions in total) • Dinner
Day 3 10/01/2017	<ul style="list-style-type: none"> • Tour 1 - North- Hawkesbury region • Tour 2 - South – Macarthur region
Day 4 11/01/2017	<ul style="list-style-type: none"> • Tour 1 - South – Macarthur region • Tour 2 - North- Hawkesbury region
Day 5 12/01/2017	<ul style="list-style-type: none"> • Workshops on: <ul style="list-style-type: none"> ○ plant propagation, ○ Gallagher fencing • Presentation - Angus Stewart



Location of Attendees

DETAILS

Day 1 - Sunday 8th January

The first day of the conference started with registration. In the afternoon session Muhammad Esa Attia and William Reid from [Australian Centre for Field Robotics \(ACFR\)](#), Sydney University, presented their research work on the use of robotics and its possible application in the field of Agriculture.

They demonstrated the operational effectiveness of Di-Wheel robot. The Di-Wheel robot consists of two powered wheel modules joined by an expandable central shaft. The demonstrators mentioned that the track width of the machine can be adjusted to fit different crop widths. The flexible modular nature of the system allows it to be assembled in six minutes, and can be easily transported. The presentation consisted of a commentary on the methods in which emerging and innovative technologies are transforming the agriculture sector. The inclusion of robotics in science, technology, engineering and maths (STEM), was also discussed.

The importance of enlightening the students about the inclusion of robotics in stem fields was emphasised and realised in the presentation. ACFR is attempting to introduce robotics into Agriculture/Rural schools for support to the future generation of ICT literate growers. The program is expected to bring an experimental based approach to learning by giving students the tool to program their own agricultural robots. The presenters explained that the ACFR's aim is to create an authentic, immersive interactive experience for school children who participate in this program.



The Dinner BBQ was sponsored and served by Alastair McLaren of [Paddock to Plate](#).



Day 2 - Monday 9th January

On Monday, the delegates headed towards to Flemington markets. On arrival the group was welcomed by Shane Chester, Head of Business Development/Corporate Strategy, who gave a tour of the market and then lead them to the conference hall.



Sydney Markets, is a world leader in fresh produce, central market operations and community market management. The local workforce of 5,000 work tirelessly, ensuring that 2.5 million tonnes of fresh fruit and vegetables are sold annually through Sydney Markets.

The following workshops were attended by the delegates on Day 2:

Session 1

- a) Numeracy in Agriculture - Nagla Jebeile and Ruth Glasgow (DoE Numeracy team)
- b) eSTEM in Action - Michael Nightingale (Mount Annan Christian College)
- c) Improving Agriculture Marking Skills – Sky Van Den Berge (Marian College)
- d) Literacy in Agriculture - Sam Schroder - (Bowral High School)

Session 2

- a) Meat Science – Sarah Strachan (Meat Standards Australia)
- b) Understanding Animal Nutrition - Graeme Williams (Castlereagh Stockfeeds)
- c) Drones & New Technologies- Ben Watts (Bralca)
- d) Resources & Rules -Sally Bannerman & Dan Rytmeister (DoE)



Session 3

- a) Managing your Farm Assistant -Tony Butler (Tumut High School)
- b) Emergency Management & Biosecurity Careers - Michelle Fifield (DPI)

- c) Performing Worm counts - Alison Small (DAWBUTTS)
- d) Australian Wool Innovations – Emily King (AWI)

A formal dinner of Champions sponsored by the [NSW Royal Agriculture Society \(RAS\)](#) was served at the Stables, with ingredients supplied by prize-winning providores, and wines representing some of the best current styles and vintages available. Three providores John Fairley, Country Valley Dairy, Michael Klausen, Brasserie Bread and Jacinta Geddes from JBS delivered a presentation on the importance of quality produce in the Australian food chain.

Day 3 - Tuesday 10th January and Day 4 - Wednesday 11th January

Days three and four were scheduled for tours of the North – Hawkesbury region, and the South – Macarthur Region. After the breakfast, the delegates were divided into 2 groups with one group heading north while the other headed south.

The Northern tour headed to Western Sydney University - Hawkesbury campus, who hosted the morning session.

The schedule for the day included:

- Workshops at [The Western Sydney University](#) - Hawkesbury campus
- Visit to [DRI](#) - Grass (Drought and Root Herbivore Impact) research facility.
- [Johnstone's Kitchen Gardens](#)
- Visit to a farm (Paddock to Plate) in Sydney's food basin, the Hawkesbury valley



Associate Professor Zhonghua Chen, a senior lecturer, researcher and Academic course advisor for the Bachelor of Sustainable Agriculture & food Security course at Western Sydney University, gave a presentation. During his presentation, he provided information about the courses that were offered at the Western Sydney University.

Professor Paul Holford lecturer, researcher and specialist in Integrated Pest Management (IPM) at Western Sydney University, addressed the participants and presented his research work in IPM in Australia and Bhutan.

Ms Grace Scott, graduate in Bachelor of Natural Science Advanced (Sustainable Agriculture & food security) at Western Sydney university, highlighted her experiences in several international research tours to United Kingdom and Canada. Grace stated that her aspirations is to move on to a career in plant science, specialising in research and communications.

After the presentations, the delegates were given a tour of the Greenhouse Research Education Training Facility (RETF). This world-class greenhouse research facility is currently under development at the University's Hawkesbury Campus. This facility will be the first of its kind, and scale, in Australia. This energy and water efficient greenhouse will allow researchers to test multiple conditions affecting the growth of plants in protected crop environment, and will provide teaching programs to educate future leaders for Australian horticulture.

The next tour was that of DRI - Grass (Drought and Root Herbivore Impact) research facility. This experimentation facility enabled researchers to simulate variable rainfall conditions, including drought, increased or decreased rainfall, and out of season rainfall events. DRI-GRASS consists of forty-eight small rainout shelters that form an experimental platform to assess the effect of drought and root herbivory on pasture grasslands.

At the end of the tour, the delegates visited Liz and Tim Johnstone's Kitchen Gardens where they grow organic specialist vegetables and salad greens for the gourmet restaurant market; and Alastair McLaren's farm (Paddock to Plate) and learned about locally produced grass-fed Angus beef cattle and pastured poultry, kept at commercial Chicken Caravans.



In the evening session of Day 3, the conference participants visited Kubota Tractor Australia display, and enquired about a range of their new tractors and implements.

The Southern tour headed to the Macarthur Region. The delegates were scheduled to visit:

- [The a2 milk processing facility](#)
- [Belgenny Farm](#)
- The University of Sydney Livestock facility
- [The University of Sydney Camden Campus, Robotic Milking facility](#)
- Wanaka Orchard
- [Belle Fleur Lavender Farm](#)

First the participants stopped at A2 milk processing facility at south western Sydney, where they were greeted by the administration, who briefed the visitors about the processing and significance of the a2- beta casein protein in cows. A2 claim that they work with the farmers to identify and select cows that naturally produce milk containing only the A2 protein. The scientists at A2 do this by using a non-invasive DNA test that analyses a strand of hair from the tail of each dairy cow. Cows certified to produce milk with only the A2 protein are then segregated and milked separately to produce completely natural a2 milk that is full of nutritional goodness.

Next up the participants visited Belgenny Farm, located on the traditional lands of the Dharawal. This farm has historical significance as it was granted to John Macarthur in 1805 as part of a 5000 acre facility called Camden Park. On this farm, the MacArthur family, their employees and convicts implemented the then latest European agricultural techniques in the fledgling Australian colony. The farm still maintains a flock of merinos which contain the genetics of the original flock. Cameron Archer welcomed the groups, and proudly showed them the educational opportunities available in the renovated Creamery.



Conference participants travelled then to the Sydney university campus at Camden, which is located at around 65km southwest of Sydney. This campus offers extensive courses in teaching and research in Veterinary Science and Agriculture. In the conference hall of the university the delegates attended workshops on Livestock in “future landscape”.

After workshops, the participants visited the Camden Robotic milking research farm (see the [YouTube video here](#)).

Local fruit grower orchard. Ed Biel – Wanaka Orchard

Belle Fleur Lavender Farm (Leonie Yip) - processing of Lavender for aromatherapy, culinary uses, perfumes and soaps.

In the evening delegates attended the formal dinner on a Sydney Harbour Cruise. The conference dinner on the harbour was a huge highlight for every participant. On the cruise, the Key note speaker, Professor Jim Pratley, shared his academic experiences and the history of Agricultural education in Australia. A highlight of the evening was the presentation of the JA Sutherland Award to Arthur Kelly for his enormous contribution to Agricultural Education. Also, Graham Quintal was awarded Life Membership for his support of Agricultural Education, and to NSWAAAT.

Day 5 - Thursday 12th January

The activities of Day 5 included workshops on plant propagation, Gallagher fencing and a presentation by [Angus Stewart](#), a presenter on ABC TV’s Gardening Australia and renowned writer, having published six highly successful gardening books including “The Australian Native Garden”. His presentation was full of practical knowledge and skills relating to propagation techniques in plants.

Another informative presentation was by [Gallagher Fencing](#), a major agriculture company (and Sponsor) having a range of farm products to exhibit.

Following this the NSWAAAT Biennial General Meeting was held and a new executive was elected. By **Maqsood (Max) Iqbal** (St Johns Park High School)

[Conference Photos Available Here](#)

[Conference Resources Available Here](#)



We Learnt, We Ate, We Drank, We Cruised, We Danced





Thank you to our conference sponsors!



Sydney Branch of NSWAAAT Report



The Sydney Branch of the NSW Association of Agriculture teachers met for the first time this year at [Oakhill College](#) in Sydney's Hills district. The success of the annual conference was still fresh in our minds and it was clear that members enjoyed reconnecting over afternoon tea.

Ewan managed to dodge the rain to show us around the school farm and explain how they used the resources of the school in their teaching and learning programs. He shared some good ideas for making use of the interest and energy of younger students in caring for the farm and livestock. While the paddocks looked lush and green at that time, all school farms struggle with inadequate space and limited pasture. Ewan explained how they approach this issue and still run Angus cattle and White Suffolk sheep.

We then moved back to the classroom for more food and a brief meeting which included a information about Agvision and the coming changes in regulations for senior assessment.

We also discussed how we as ag teachers can support schools who will be teaching agriculture for the first time.

Geoff (Smith) shared his expertise from many years in the wool industry; explaining how he normally approaches teaching this enterprise, describing the various tests that are done on wool and providing the opportunity for us to examine samples of wool. Other members also shared tips regarding the resources that are available, options for excursions and activities for teaching about sheep for wool.

Debbie Bunn (Science & Agriculture Teacher, Galston High School)





New England Network Report



The New England group had their PI network meeting on Wednesday, discussing various things such as Competition dates, World Skills, Industry currency. Pictured is Gorgie Oakes (an ex teacher who has gone back to being a district agronomist), going through a practical session at McIntyre High School on soil health. We were utilising the RASH health check which she uses with her farm visits. **Justin Connors** (Manilla High School)



Sir Ivan: Fences from the Ashes



AgCAP student Tom Nairne and brother Sam installing Beefy Posts overseen by Tim

The Sir Ivan fire burnt more than 55,000 hectares of land during the worst fire conditions ever experienced in NSW.

35 houses were destroyed by the fire with another 11 damaged. A church and community hall were also destroyed. There were also extensive stock losses, and more than 5,000 kilometres of fencing damaged or destroyed.

Mission Statement: to raise funds and acquit those funds raised to support the "well-being" or "wellness" of fire affected communities through provision of fencing materials and school student labour in a voluntary capacity to repair and or replace fencing destroyed by fires.

This is a cooperative relationship between donors, schools and affected farmers.

The aims are to provide support and hope to communities affected by fire, to provide healing for students who have felt powerless because of the impact of the fires, and to encourage altruism by students who have skills and wish to help in constructing fencing as well as schools and the broader community who wish to assist by fundraising for this project.

Timeline:

Launch on 23rd March 2017 at Farrer Memorial Agricultural High School

Fencing commence from 18/19th March 2017

Anticipated Completion: End of Term II (NSW) 2017

Funds will be held by NSW Association of Agriculture Teachers until expended on the project however if significant funds remain they will be held in trust until they can be used in further emergency response by school students in NSW. These funds will be audited in accordance with NSW Incorporated Body regulations.

The initial focus area will be the Cassilis area with potential expansion to other areas if funds and labour permit.

Initial Project Partners:

Farrer Memorial Agricultural High School, Blazeaid

Clipex Fencing Tamworth , Calala Rotary Club

NSW Association of Agriculture Teachers inc.

How Can Schools get involved:

Fencing: Schools can contact BlazeAid <http://blazeaid.com> at the moment Camps are operating at Cassilis and Dunedoo with another camp to commence at Coolah by the end of March.

The Cassilis camp has a marquee available for students in swags to sleep and camp area for tents. Hot showers, toilets and all meals are provided to volunteers. It is requested that small numbers of students (ie less than 10 or 12) attend at one time as they have to be taken to the properties to work and there is a limit to the number of vehicles / volunteers available. Please contact the basecamp at least the day prior to your intended arrival so we can include you in a team and put your name on the dinner list. If possible, you should aim to arrive prior to 5pm

Blazeaid provide all PPE and have a fencing trailer for each team which is led by an experienced fencer. Breakfast is at 6.30 am, people make their own lunches and have bottled water and fruit as well, then muster at 7.15 am for a 7.30 am departure to the fire ground. They usually return about 4.30 pm. Blazeaid will manage child protection issues in showers by setting times for student showers when other volunteers may not enter.

The NSW Department of Education has requested that it be treated as an excursion, rather than structured work placement as there are less complications in terms of paperwork and insurance liability as volunteers are covered under the Blazeaid insurance policy. VET students could perhaps apply for RPL for fencing tasks after they have completed any volunteering. The Cassilis camp is working in the area with the most damage and is closest to the properties.

Camps operate 7 days a week.

Funding: All schools might like to have a fundraising event of some kind to assist in providing funds for fencing materials. See details on the following page.

Further information / inquiries

[Facebook:](#)

Sir Ivan Fires from the Ashes Project: Graeme Harris 0438656692

Cassilis BlazeAid: Brian and Chris Carr 0475 115-899

Sir Ivan Fences from the Ashes

For 1 kilometre of Boundary Fencing Clipex has donated.				
No	Item Code	Item description	Cost ea.	Total
208	GAL180-9	GAL POST 180cm 9 Slot	9.20	1913.60
42	BEEFY GAL180-9	Beefy GAL Post 180cm 9slot	17.00	714.00
5	SFKS-100 BEEFY (BOM)	End Assembly 'Beefy' to suit 1200h Fence	170.00	850.00
5		<i>Strainer Post 100mm Beefy to suit 1200H fence</i>		
5		<i>Foot Plate 400 x 300</i>		
5		<i>2 x 900mm Pegs to suit Strainer Post</i>		
5		<i>3m Stay to suit End Assembly</i>		
5		<i>Stay Fast Wire Rope + Turnbuckles</i>		
1	GH-SFK	Gate Hinge for Stay Fast Kit	36.00	36.00
1	FG-14i	14 Foot ii Brace Mesh Gate	120.00	120.00
5	W-TK9-110-15-200	Tuffknot Wire 9-110-15 200m Rolls 2.8mm Blackmax Top & Bottom	415.00	2075.00
2	W - BW200HTML	Barbed Wire 2.00mm HT Maxlife 500m Roll	108.00	216.00
2	W - BW180HTML	Barbed Wire 1.80mm HT 500m Maxlife	90.00	180.00
				6104.60

Internal fencing will use approx 50% less Gal posts

Sponsor / Donor Options:

Sponsors could donate

\$10 for a Gal Post
 \$20 for a Beefy Gal Post
 \$40 for a Gate Hinge for Stayfast Kit
 \$100 for a roll of Barbed Wire
 \$125 for a 14 Foot Gate
 \$200 for a Fence end assembly (ie Strainer, stay, anti sink plate, Straining cable
 \$500 200m roll of Netting
 \$600 materials for a 100 m section of fencing
 \$6100 for a km of fence including gates and several stays.

Why we want to use Clipex.

Very quick to erect with no need to dig post holes. Posts can be driven in.
 Robust and wont rot or burn
 Don't have to be highly skilled to erect the fence
 Generous donation to start the project

When making a Direct Debit:

A/C Name: NSW Association of Agriculture Teachers

BSB: 082-939 (NAB - Yass)

A/C No: 639 757 522

Reference: Your Initial, Your Surname, IVAN

Please send copy of deposit via email so receipts can be returned to you to Treasurer.nswaat@gmail.com

Make cheques payable to:

NSW Association of Agriculture Teachers, 16 Finlay Ave, Beecroft NSW 2119



(Left) Russell and Sue from Clipex who donated the first load of fencing materials.

(Right) Graeme Harris (NSWAAT) and Ruythe Dufty (School Education Director, New England Region-South)



(Left) New fencing beside burnt out cottage constructed by Sir Ivan Fences from the Ashes Project.

(Right) Farrer Memorial Agricultural High School VET teacher John Drenkhahn installing steel posts with Tim from Blazeadi watched by Ton Nairne AgCAP student from Farrer fencing at Bindi near Uarbry.



3

Resources



Resources from Teachers: Evans River K-12 Community School



Thank you to **Allyson
McGeary** for the
following resource for
Technology Mandatory

Year 8 Technology: Agricultural Technology

Name: _____

Outcomes:

- Identify requirements in design projects
- Describe safe work practices
- Identify the skills needed to undertake design projects
- Develop research skills in the collection of information
- Plan steps for design projects

Project: My Fine Feathered Friend

Increasingly, backyard chickens are becoming household pets.

Often, pet owners like to project human-like qualities onto their pets. This includes dressing their pets in clothing.

Currently it is quite fashionable to dress chickens in all sorts of clothing.



Task:

You are required to design an outfit for a hen. You are required to undertake the necessary steps to ensure your final outfit would be suitable for production and marketing.

1. In the space provided, neatly sketch some initial ideas you may have for various outfits. (6 marks)

2. After researching various materials on the internet, complete the table below to identify possible materials to use in the outfit. (10 marks)

material	properties	positives	negatives	comments
eg leather	durable, looks good, natural	easily cut , can be sewn, doesn't fray	can be expensive, vegans would oppose it	leather might be suitable for straps &/ or ties

Are there any recycled options for materials?

3. Decide on a purpose for your hen outfit. Is it to keep the hen warm? Is it to protect the hen from the sun? Is it purely decorative? (2 marks)
Your decision will probably impact on your choice of materials to use.

4. Once you have decided on the materials you are going to use, you will need to consider how the outfit is to be assembled. Will it be sewn, glued, knitted or crocheted? (2 marks)



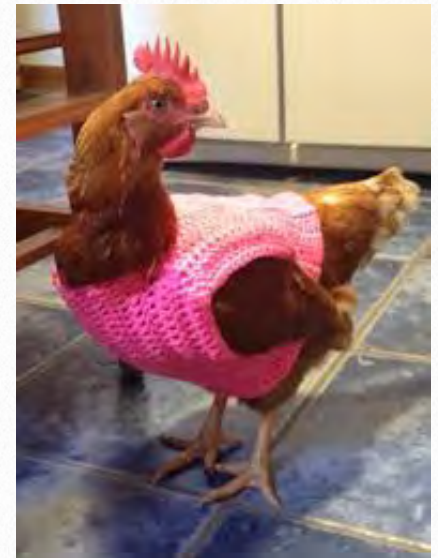
5. Identify any skills and/or equipment necessary to create the hen outfit. (4 marks)

6. Identify any costs associated with the production of this outfit. (2 marks)

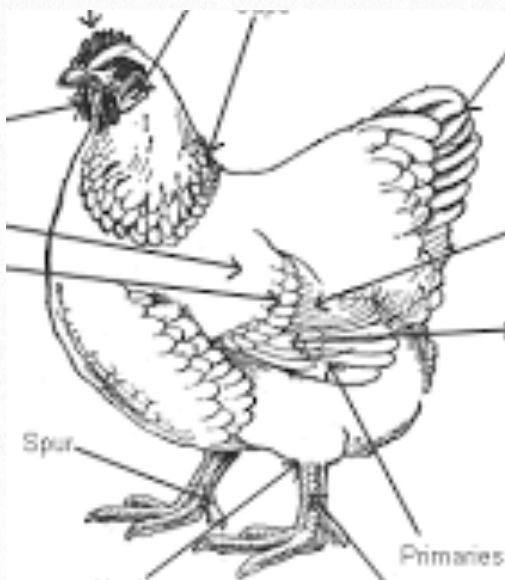
7. Identify any risks associated with the use of the equipment and/or materials.

(4 marks)

8. Consider the anatomy of a chicken. How does the structure of a hen differ to that of humans? (4 marks)



9. Using the diagram provided as inspiration, create a set of points to consider when you are constructing your hen outfit. (4 marks)



10. In the space provided, sketch a pattern for the outfit you propose to create.
(4 marks)

11. Identify all the resources (journals/ websites/ books/ knowledgeable people) you have used to prepare for the production of your hen outfit. (2 marks)

12. Now that you have all the necessary information/ skills, create the outfit you have designed. Your teacher may help you acquire the materials and equipment you need. Provided a photo of the completed outfit. (4 marks)



Stage 5 Resource from Griffith High School

Beef Eater

Name:

Different people & therefore different markets, have different opinions on the taste & quality of cattle meat products. Some people love a good rump, whereas others prefer the chuck stuff. The aim of this activity is to evaluate the taste & quality of various beef meat products. Assess the beef & fill out the table below.

Beef Assessment Table from Gannon’s Butchery

Name of Cut		
Before Cooking & Eating		
From where on carcase?		
Cost /Kg		
Is fat present in meat?		
Is fat visible on outside of meat?		
Colour of meat		
Colour of fat		
After cooking – Rate out of 10		
1-----10		
Tough/Chewy		Melts in Mouth
Tenderness		
General appearance		
Fattiness		
Taste		

Which Beef meat did you like the best? Why?

Pork on Your Fork

Name:

Different people & therefore different markets, have different opinions on the taste & quality of pork meat products. Some people love a good rump, whereas others prefer the chuck stuff. The aim of this activity is to evaluate the taste & quality of various pork meat products. Assess the pork & fill out the table below.

Pork Assessment Table from Gannon's Butchery

Name of Cut		
Before Cooking & Eating		
From where on carcass?		
Cost /Kg		
Is fat present in meat?		
Is fat visible on outside of meat?		
Colour of meat		
Colour of fat		
After cooking – Rate out of 10.		
Tenderness		
General appearance		
Fattiness		
Taste		

Which Pork meat did you like the best? Why?

Chicken Feed

Name:

Different people & therefore different markets, have different opinions on the taste & quality of chicken meat products. Some people love a good wing, whereas others prefer the leg stuff. The aim of this activity is to evaluate the taste & quality of various chicken meat products. Assess the chicken & fill out the table below.

Chicken Assessment Table from Gannon's Butchery

Name of Cut		
Before Cooking & Eating		
From where on carcass?		
Cost /Kg		
Is fat present in meat?		
Is fat visible on outside of meat?		
Colour of meat		
Colour of fat		
After cooking – Rate out of 10.		
Tenderness		
General appearance		
Fattiness		
Taste		

Which Chicken meat did you like the best? Why?

2017 Year 9 Agriculture Assessment Task

Livestock Diseases

NAME:

DUE DATE:

WEIGHT: 15% (Assessment 1/5)

CLASS: Year 9 Agriculture

LENGTH: 1 A4 Page

TEACHER:

REPORT OUTCOME: 5.5.2 – Collects and analyses agricultural data and communicates results using a range of technologies.

SCENARIO: There has been a new livestock disease discovered around thearea. The consequences of the disease spreading will be devastating to the industry.

TASK: Your job as an education officer for the Local Land Services is to develop an information sheet about the new disease.

The A4 page information sheet should include the following:

1. **Disease Name**
2. **Type of livestock affected**
3. **Picture or drawing of the disease**
4. **Primary and Secondary causes of the disease**
5. **Symptoms**
6. **Methods used to control and prevent the animal disease**
7. **Steps farmers should take if they think their livestock has the disease**

Your teacher needs to receive your information sheet **twice** by the due date.

It is recommended that your disease information come entirely from your **imagination**. In reality nobody will know anything about the new disease and that is the idea of the information sheet. A livestock disease is a serious situation and it would be essential that all farmers receive the information; this is why your teacher must receive the same information sheet **twice**.

It is also recommended that you hand in a draft during week 6.

Words to Know

Immunity – The ability of an organism to resist disease.	Pathogen – A disease-causing organism.
Vaccination – An injection of a substance to produce immunity or resistance to a disease.	Primary Cause – Is what actually causes the disease. E.g. Bacteria
Secondary Cause – Is what assists the disease to occur. E.g. Poor Nutrition, Overcrowding	Symptoms – Are visual signs of the disease. E.g. wool falling out, Lameness.
Prevention – Management practices that minimize the chances of a disease occurring.	Control – Practices that will improve sick animal's health. E.g. Drenching

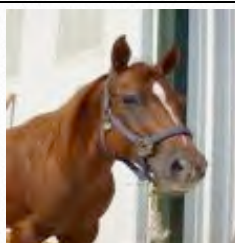


Marking Scale

Student Name: _____



<u>Aspect</u>	<u>Criteria</u>	<u>Your Mark</u>
Disease Name	1 mark – Clear name at the top of the information sheet.	
Type of livestock affected	1 mark – Student must clearly state the type of livestock affected. E.g. young lambs, layer chickens etc	
Picture or diagram	2 marks – Clear and labeled diagram 1 mark – A diagram provided	
Primary and Secondary causes of the disease	3 marks – 1 primary cause and 2 secondary causes given 2 marks – 1 primary cause and 1 secondary cause given 1 mark – Either a primary or secondary cause given	
Symptoms	3 marks – 3 symptoms given 2 marks – 2 symptoms given 1 mark – 1 symptom given	
Methods used to control and prevent the animal disease	4 marks – 1 control method with a way to apply it plus 2 preventative measures 2-3 marks – 1 control method with preventative measures mentioned 1 mark – A method to control it mentioned	
Steps farmers should take if they think their livestock has the disease	3 marks – Students must have 3 steps in a logical sequence 2 marks – 2 steps taken 1 mark – 1 step taken	
Presentation	2 marks – Easy to read, typed, generally well presented 1 mark – Unclear and hard to read	
Received information sheet twice using different methods	4 marks – Received twice by the due date via two of the stated methods 2 marks – Received once by the due date by one of the stated methods	
Comment		/23 marks /100%



Work Samples



LOCAL LAND SERVICES
RIVERINA

Snout Ulceritis

Livestock Disease Information Sheet

There has been outbreak of a new livestock disease in the Riverina that affects pigs. This disease is called Snout Ulceritis. It can affect domestic and wild pigs of any age (i.e. sucklings, weaners and porkers). If this disease spreads it would be devastating to the livestock industry. Please read this information sheet carefully, so we can limit the spread of Snout Ulceritis locally.

What causes Snout Ulceritis?

The primary cause of the infectious disease Snout Ulceritis is the bacteria *Bacillus porcusis*. This pathogen can be found in soil, faeces, leaf litter and hay. It usually stays dormant until it enters a pig's snout. Once it becomes active it attaches to the living tissue and spreads, causing ulcers on the snout, in the nasal cavity and the throat. These ulcers cause difficulty with breathing and eating, sometimes resulting in death if not treated quickly. When ulcers are pustular the disease can be spread through the herd by nose to nose contact.

Secondary causes of the disease include:

- * Lack of food- This causes pigs to scavenge for food in soil, animal faeces and bedding hay where the bacteria maybe found.
- * Unsanitary penning- This increases the likelihood of the bacteria being present because it provides ideal conditions for the bacteria to grow, such as temperature, moisture, and pH.

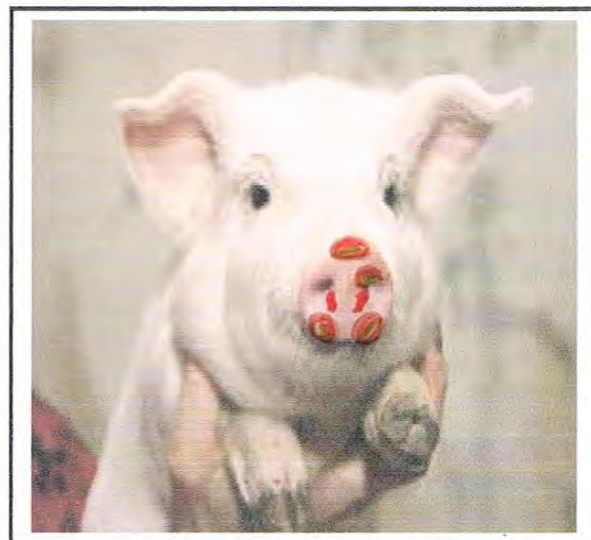
Management of Snout Ulceritis:

The recommended control strategy for Snout Ulceritis is:

- * Antibiotics- This can be given to the pig by injection under the pig's skin, daily. Antibiotic cream can also be used on the snout and inside the nostrils, however care must be taken when applying to reduce human contact with pus from the ulcers. It is best to wear gloves at all times and wash your hands after handling livestock.

Recommended strategies for disease prevention are:

- * Vaccination against the disease- The vaccine is given by injection under the skin. Immunity occurs after 3-5 days and lasts for 6-8 months, at which time revaccination is required.
- * Ensuring that any pigs that are purchased have been vaccinated before putting them with other pigs.
- * Controlling feral pigs.
- * Regularly cleaning pens and providing adequate food.



Weaner pig showing signs of Snout Ulceritis, including red pustular ulcers and nostril bleeding.

Symptoms

Symptoms of Snout Ulceritis include:

- * Red pustular ulcers on the nostrils and snout, as seen above.
- * Nostril nose bleeds.
- * Weakness, tiredness and/or lack of appetite.
- * Breathing difficulty.

What should you do if you think your pigs are affected by Snout Ulceritis?

1. Quarantine affected pigs from the rest of the herd to prevent further spread of the disease.
2. Contact a vet for confirmation of the disease.
3. If the disease is detected, inform neighbouring farmers and The Local Land Services.
4. If your whole herd of pigs is affected and the antibiotics are not making any improvement to their health, it may be necessary to kill off the herd to control the disease. Any pigs that die from Snout Ulceritis must be burnt in an underground pit.

ATTENTION!!!

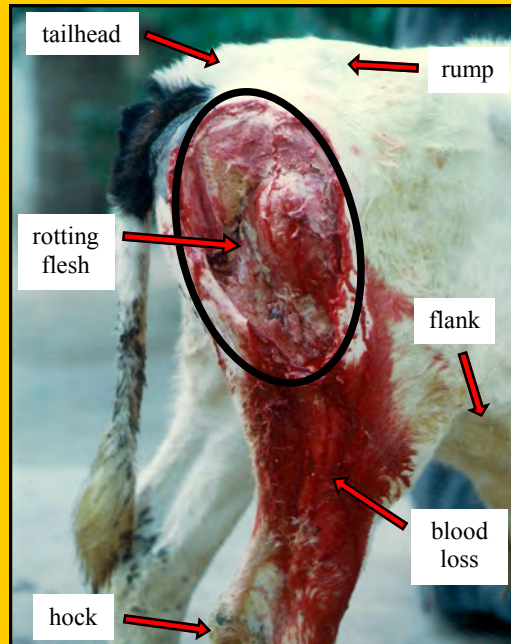
Zombiteria

**D
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Livestock affected

- Horses and Cows



Disease Symptoms

- Loss of hair
- Weight loss
- Rotting flesh wound

Disease Control

- Separate livestock into smaller groups
- Clear and burn deceased animal carcasses immediately
- Clean feed and water 3 times per week

Disease Prevention

- Observe livestock daily
- Take to the vet
- Burn deceased animal carcasses immediately

Primary Cause of the disease

- Bacteria

Secondary causes of the disease

- Big groups of livestock
- Dead animals within the livestock
- Old water and feed

Steps to take if there is a suspected outbreak of Zombiteria in livestock

1. Watch the animal daily
2. If the livestock displays any symptoms seek veterinary assistance immediately
3. Get shots and cream from the vet (apply the cream to the back of the animal daily)
4. If the animal gets 2 symptoms then separate from others, go to the vet once a fortnight.
5. If the livestock gets all the symptoms, put it down!
6. Burn the corpse to make sure the disease does not spread



Chloe Perez

Knee Bone Disease

2. This disease affects horses.



3.

The horse finding it hard to move.

4. Pushing your horses to enter into too many show jumping competitions and the old air also too much pressure on the horse's knee caps.

5. Your horse falling over a lot and finding it hard to stand up for long periods of time, also if the horse is looking very tired, weak and cold.



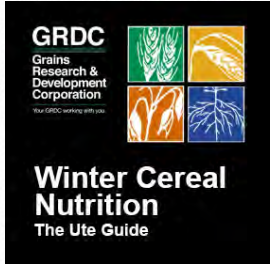

6. In winter keep your horses in a warm environment as much as possible, put hot water on muscles and heat cream.

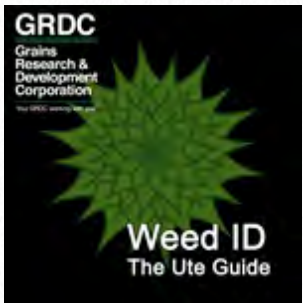


7. Let it rest, do not push it to move around a lot, tape its knees so that when the horse does move around its knees are secure and in place. Keep them as warm as possible throughout winter.





By Chelsea Best

Thank you to Carl Chirgwin and students of Griffith High School for providing these samples.

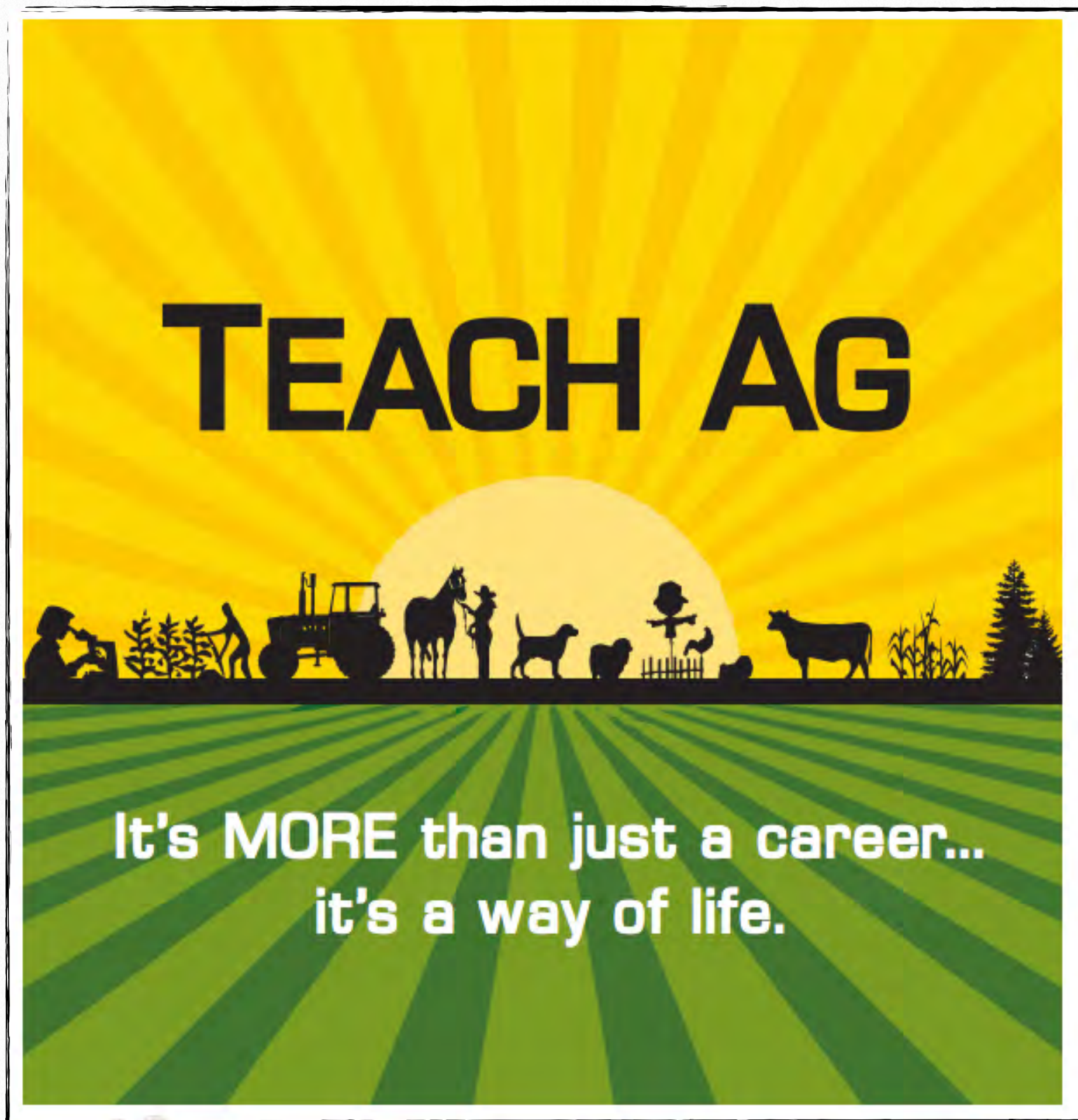
Ag Applications

Name & Icon	Description
GRDC Ute Guides 	<p>GRDC UteGuides App is a mobile information resource for farmers and agronomists working in the Australian Grains Industry. It provides searchable library topics with extensive high resolution images on subjects relevant to grain-growers. It compliments and extends GRDC's paper-based Ute Guide series by linking all resources under a single App. Currently, the library contains only the "Herbicide Injury" Guide, but other topics will be included throughout 2016 and beyond.</p>
GRDC GrowNotes 	<p>Wheat, chickpeas, sunflowers – whatever the crop, you'll find everything you need to know in this easy to use app for download on your mobile devices.</p> <p>At home, in the ute, or out in the paddock, you can access GRDC's GrowNotes, Tips and Tactics, as well as, the latest GRDC news, with the tap of a finger.</p>
Winter Cereal Nutrition: The Ute Guide 	<p>The Ute Guide is designed to assist growers to easily identify cereal nutritional disorders. It covers both nutrient deficiencies and toxicities and environmental, chemical and physiological disorders which can give similar symptoms to nutrient disorders. The app contains prominent images, thorough descriptions of the issue and its contributing factors.</p>
Insect ID: The Ute Guide 	<p>This Ute Guide is a comprehensive reference guide for insect pests commonly affecting broadacre crops and growers across Australia, and includes the beneficial insects that may help to control them. Photos have been provided for multiple life-cycle stages, and each insect is described in detail, with information on the crops they attack, how they can be monitored and other pests that they may be confused with. Use of this app should result in better management of pests, increased farm profitability and improved chemical usage. As not all insects found in field crops are in this app, further advice may be required before making control or management decisions. Talk to your agronomist or the Department of Agriculture/Primary Industries for more complete information on identification, management and thresholds.</p>

Name & Icon	Description
Weed ID: The Ute Guide 	<p>This Ute Guide application is designed to assist growers in the identification of the most common weeds found in paddocks throughout Australia. Where possible, photos have been provided for each stage of the weed's lifecycle, from seed and seedling through to mature and flowering plants. These are categorised by plant type, and results for each can be refined by state and lifecycle, and whether they are native, currently flowering or have a distinctive smell.</p> <p>The application allows users to search, identify, compare photos of their own paddock weeds to those in the app.</p>
Soil Water App 	<p>SWApp provides Australian farmers and advisers with a ready estimate of plant available water in the soil (PAW) during a fallow and early crop phase. Soil water (PAW) can be a critical component of a crops water supply, influencing crop yield and profit. Estimates of PAW contribute to richer decisions at planting and early in crop growth where inputs can be adjusted. SWApp estimates soil water (PAW) using a tested water balance model and inputs from:</p> <ul style="list-style-type: none"> • weather data from a nearby Bureau of Meteorology (BoM) sourced from the Silo (https://www.longpaddock.qld.gov.au/silo/); plus • rainfall data from a local rain gauge (entered manually); or • rainfall data automatically uploaded from a Bluetooth enabled rain gauge (10m range); and • a soil description best suited to local conditions; and • soil and crop cover conditions for each paddock. <p>The model in SWApp simulates infiltration, runoff, evaporation, transpiration and deep drainage to provide an estimate of soil water on a daily basis. Additionally, SWApp uses long term climate data to provide a forward looking estimate of likely outcomes for the specified soil, climate and cover conditions. Starting conditions are specified by the user and can be adjusted from sensors such as a soil push probe or soil water sensor network.</p>
Veg Pest ID 	<p>Veg Pest ID helps farmers and agricultural professionals identify pests on Australian vegetable crops. Even tricky insects, diseases and disorders can be found with a few taps or keyword search. This app brings together a database of pictures and information on pests, diseases and disorders affecting Australian vegetable crops. It makes information available in the field, where it is needed, without having to carry a ute load of guides or trawl through a bookshelf of handbooks. Whether trying to identify an unfamiliar insect, find the source of a nutritional problem or take the first steps towards control, the Veg Pest ID app will help farmers protect and manage their crop.</p>

Name & Icon	Description
Yates My Garden 	<p>App's main feature is its Garden Visualiser tool which gives users a graphical representation of how different plants will look in their garden. The Garden Visualiser allows you to search for particular plant types and overlay them on an image of your garden. The plants can also be repositioned and scaled to the user's liking. In all, there are over 1000 plant species to choose from. The app includes an extensive database of information that can guide the user through each stage of the garden life cycle. All advice is specific to the user's geographical location and weather/climate. It will then track the progress of your garden, charting its progress and sending watering reminders for individual plants.</p>
Yates Garden Problem Solver (Ipad) 	<p>The Yates Problem Solver is a handy app that you can take with you into the garden. You can browse through some common (and some unusual) problems, pests and diseases that you find in an Australian garden. You can search via plant type, or category (pest, disease or weed). Once you've seen your problem, you can click through to get detailed information.</p>
ABC Vegie Guide 	<p>ABC Vegie Guide is an essential tool for all vegetable gardeners – from the novice to the experienced - to help you find out what vegie should be planted when, no matter the climate zone you're in. ABC Vegie Guide will give you all the information you need to produce healthy crops throughout the year, including growing tips, pest and disease control pointers and harvest guides.</p>
Farm Biosecurity 	<p>Farm Biosecurity has a number of materials to help you implement biosecurity measures on your farm. These include industry plans and farm manuals, checklists, animal declaration forms, health statements and plant pest fact sheets. Use the profiler to create your own biosecurity toolkit. Simply select the livestock and crops that are specific to your farm and the profiler will muster all the information from the farm biosecurity website that is relevant.</p>
NSW WeedWise 	<p>The NSW WeedWise app provides key information to help users reduce the impact of noxious and environmental weeds in New South Wales (NSW). The app profiles over 300 weeds, describing their legal requirements under the Noxious Weeds Act 1993, control information and registered herbicide options.</p>
CluckAr 	<p>Give a Cluck and find out how free range those eggs really are with the CluckAR augmented reality app from CHOICE, Australia's leading consumer advocacy group. Just point your phone at the top of an egg carton and see for yourself. Not every egg labeled "free range" can pass our test. With CluckAR you can find the googgiest eggs around.</p>

Resources from Industry



PASTURE COMPOSITION AND GROUND COVER CHECK

EXAMPLE

Ground Cover Type	Tally of "hits"	No. of "hits"	% of "hits"
Pasture Grasses - Perennial			
Danthonia	III	8	20
Red grass	IIII	4	10
Pasture Grasses - Annual			
Liverseed grass	II	2	5
Pasture Legumes			
Ball clover	II	2	5
Weed	III II	12	30
Litter	IIII	4	10
Manure	II	2	5
Rock			
Bare Soil	III I	6	15
Total hits →		40	
		Total % →	100
GROUND COVER = Total % - Bare soil % (100 - 15)			85%



For further assistance contact:

Border Rivers-Gwyndar Catchment Management Authority
Tel: 02 6721 9850 Email: brg@cma.nsw.gov.au

NSW Department of Primary Industries
Tel: 02 6722 1388

Border Rivers-Gwyndar



(See example on front cover of pad)

Date: _____

Pasture Grasses - Perennial

Pasture Grasses - Annual

Pasture Legumes

Weed

Litter

Manure

Rock

Bare Soil

Total hits →

Total % →

100

GROUND COVER = Total % - Bare soil %

%

- Calculate “% of hits” by dividing “No. of hits” by “total Hits” and multiplying x 100
- “% of hits” column must add up to 100
- Subtract the bare soil percentage from 100 to give an indication of ground cover
- Use a quadrat and the enclosed coloured cards to check these estimates



Border Rivers-Gwydir Catchment Management Authority
Tel: 02 6721 9850 Email: brg@cma.nsw.gov.au

Border Rivers-Gwydir



CATCHMENT MANAGEMENT AUTHORITY

Landcare RASH Soils Manual

Fantastic photographic instructions on soil testing.

Belgenny Farm Resources

The Belgenny Creamery teaching resources have been developed to support students in either an onsite or online visit to the historic Belgenny Creamery. Students undertaking these units will consider the way that science and technology have changed and improved agriculture over time.

Biosecurity for Schools

A unit of work to assist students gain an understanding of biosecurity through the development of the school farm biosecurity plan

Biosecurity Vehicle Contamination Cleaning Record, Biosecurity People, Vehicles, Equipment, Biosecurity action plan for schools template

Checklist for a school farm biosecurity plan

Department of Primary Industries Horticulture Resources

Farming for the 21st Century - NEW RESOURCE

Farming for the 21st Century (NSW HSC aligned) aims to highlight the range of developing technologies which are helping to transform agricultural management and production. This resource gives teachers and students links to resources and activities for studying and analysing agricultural technologies and their effects on industry.

SEED – the portal for Sharing and Enabling Environmental Data

Initially containing publicly accessible land, air and water data from NSW Government agencies, SEED is a web portal that will grow over time as more data is added but currently it allows you to:

- manage land and ensure its long term sustainability
- access data for research and advisory purposes
- learn more about the environment in your local area
- help protect our environmental and cultural heritage.



Why Robotics Will Change Agriculture

At this year's RoboUniverse event in San Diego there was a full-day track on December 14th dedicated to the application of robotics to agriculture. The industry track, pulled together in great part by Nathan Dorn, CEO of Food Origins and an Advisor to The Mixing Bowl, featured a knowledgeable group of automation/robotics experts and food producers who drew on their experience to define the opportunities and sharpen focus on the challenges.

Climate Corp. unveils most robust R&D pipeline in digital ag

The Climate Corp., a subsidiary of Monsanto Co., unveiled for the first time more than 35 projects in its research and development pipeline. The company also announced plans to expand its industry-leading Climate FieldView digital agriculture platform into new international geographies over the next few years.

Drones may improve agricultural practices, increase efficiency

The use of drones has evolved from a hobby to military use and now to agriculture. Farmers are using drones to inspect their crops, detect diseases and deliver chemicals. This technology is expected to increase crop yields and save growers time and money. The Association for Unmanned Vehicle Systems International predicts that 80 percent of drones in the commercial sector will be used for agriculture, according to USA Today.

Rabbit virus kits puts power back into hands of farmers

Landline By Prue Adams

Posted Fri 24 Feb 2017, 12:38pm



PHOTO: Release site kits with instructions for land managers to follow, and vials for sample collection. (Landline: Prue Adams)

Farmers and environmental groups have received the necessary kits for next week's rabbit virus release, with the rollout of the RHDV-K5 Korean strain of the calicivirus set to begin from March 1.

It will be the first time in more than 20 years that a new rabbit biocontrol agent has been launched in Australia.

After a decade of testing and research through the Invasive Animals Cooperative Research Centre RHD Boost project, K5 will be released at more 600 sites covering all states and territories.

The researchers expect this newest biological control will reduce the overall rabbit population by about 20 per cent.

"It's not a silver bullet," said Dr Tarnya Cox, who is employed by NSW Department of Primary Industries and heads up the RHD Boost Project.

She said the virus was expected to be more successful at eradicating rabbits in the cool, wet regions of the country — the districts where the original calicivirus released in 1996, did not work so well.

"From a welfare perspective, it is a haemorrhagic disease so there is that concern, but this strain kills rabbits faster than what we already have," she said.

"We want to make sure that whatever we are using is humane and acts as quickly as possible, so that's why we have also chosen K5, because it's fast."

Land managers in many regions have been doing spotlight rabbit counts so they can compare rabbit populations before and after the virus release.

Four known rabbit caliciviruses in Australia

- RHDV1: escaped from quarantine on Wardang Island, SA in 1995, and officially released following year. Killed up to 90 per cent of rabbit population.
- Benign calicivirus: not known how long it has been in Australia. Does not kill rabbits but enables immunity against other caliciviruses. More common in cool, wet districts.
- RHDV2: first identified in ACT in 2016. Not known how it came to Australia. Current vaccine doesn't protect against it.
- RHDV-K5: Korean strain, to be released nationally next week



PHOTO: Land managers will be given vials of RHDV-K5 virus. (Landline: Prue Adams)

They have also been laying out carrot and oat baits in a bid to "train" the wild rabbits to accept similar virus-laced baits next week.

In the week following the release, land managers will be required to check for dead rabbits, take tissue samples to be analysed for cause of death, and log some of their results on a new mobile app called Rabbit Scan.

The release of this latest strain of virus is complicated by the prevalence of another strain of calicivirus, known as RHDV2; endemic to Europe, RHDV2 found its way to Australia early last year, and has now reached Canada and Africa.

It has been killing rabbits and hares all across Australia.



PHOTO: Land managers collect blood and tissue samples from rabbits during a spotlight count. (Landline: Prue Adams)

It is not known how the mystery appearance of this virus will impact the intentional release of RHD-K5 next week.

Owners of pet and show rabbits have been urged to vaccinate their animals as the current vaccine administered by vets is said to protect most rabbits against K5.

There is no vaccine available in Australia for the RHDV2.

4

Professional Development

Have you reviewed your Farming on the Fringe Conference PD hours?





You're invited to attend a Teacher Professional Development at the 2017 Sydney Royal Easter Show

At just \$16.50 you will gain entry to the Show and workshop
PLUS 2 free tickets for your family* to come to the show –
that's great value!

The RAS Education Team is hosting a Primary
AND a Secondary Teacher Professional
Development workshop where you will:

- Participate in a behind-the-scenes tour of the Dairy Farmers Working Dairy
- Workshop engaging agricultural projects for students
- Learn how to incorporate agriculture into small areas and where to find the huge number of resources about Australian agricultural industries.
- Participate in a number of curriculum linked activities that you can apply to your classroom!

Workshops and information sessions are packed with case studies, presentations and resources to support your journey into agricultural teaching!

*See Terms and Conditions for full details

When:
Primary April 11
Secondary April 12

**But wait there's
more...**

WIN a Dairy Incursion* with
'A Smart Farmer'

Every ticket purchased gets
an entry into our
'Lucky COW Prize'

To buy tickets visit:
www.rasnsw.com.au/education/upcoming-events/

For more information contact us
at education@rasnsw.com.au

IN V I T A T I O N

During the 2017 Sydney Royal Easter Show the Royal Agricultural Society of NSW Sheep & Wool Committee will host a seminar presenting recent research findings on the following topics.

- ❖ *Advances in Footrot research,*
- ❖ *New developments with Johne's disease vaccine,*
- ❖ *The latest research on sheep health including resilience to internal parasites*

The study into footrot research has been made possible by a philanthropic donation to the University of Sydney by RAS Honorary Vice President Peter Wrigley MBE VRD and family. Mr Wrigley was the founding Chairman of the Sheep & Wool Committee in 1975.

When & Where

Date: Wednesday 12th April 2017

Time: Between 12 noon and 3.00 pm

*Where: Sommerville Room, The Dome,
Sydney Showground*

Speakers

*from the University of Sydney, School of Veterinary
Science*

*Professor Richard Whittington BVSc (Hons 1, University
Medal) MACV Sc PhD GAICD FASM Chair Farm Animal Health,*

*Professor David Emery BVSc BSc(Vet) PhD Professor
Veterinary Parasitology,*

Andrew McPherson and Dr Om Dhungyel

**Please RSVP by 24 March 2017
to Pat Cooper**

T: 02 9704 1227 E: pcooper@rasnsw.com.au

SAVE the DATE



TASMANIAN
agricultural
education
NETWORK



2018 NAAE National Conference

Sunday 7 – Thursday 11, January 2018
Launceston, Tasmania

Celebrating diversity
and innovation in
agriculture and education



Sponsorship opportunities available
Contact: andrew.harris@education.tas.gov.au



Sheep Boot Camp for Ag Teachers



PIEFA CONFERENCE 2018

REALM HOTEL, CANBERRA • 29 APRIL - 1 MAY 2018



food fibre & fishing education

Primary Industries Education
Foundation Australia



**Registrations
open soon**

Registration includes:

- One ticket to the **Welcome Reception** the night before Conference.
- **The two-day Conference** - including access to plenary sessions, keynote speeches, workshops, lightning sessions and display area (trade fair).
- Morning and afternoon teas, and lunch.

Tocal College delivers courses designed specifically for teachers and is endorsed to provide QTC Registered Professional Development for teachers accredited at Proficient Teacher, for the following courses:

Agpatch – Garden connections

An online course consisting of five modules that guide you through planning for the integration of a school garden into classroom practice and for connecting it to local primary industries.

This is a self-enrol free course.

The Climate Challenge for NSW teachers

This course will assist teachers of Agriculture and Primary Industries subjects in NSW to deliver up to date information related to weather and climate change. It specifically addresses the 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.

Completing this course contributes 5 hours of QTC Registered PD addressing 6.2.2 and 6.4.2 from the Australian Professional Standards for Teachers towards maintaining Proficient Teacher Accreditation in NSW.

Cost: \$150

5

Around the Schools

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



Kelso High Campus Canberra Show Success



Kelso High School attended Royal Canberra show this February! Four months of preparation and hard work and fundraising to fund the excursion has allowed the students in years 9/10/12 to represent for the first time! Many people helped us in getting to Canberra including Wendy Bowman and her family of Canowindra who donated two Angus Steers.

As a teacher I am so proud of my beginner students who managed to win a range of ribbons in their parader heats.

3rd place in a 15 yrs heat 2nd and 5th in a 16 yrs heat and 5th overall for the 16yrs in the final!

Congratulations to all of my students but also to every student who attended Canberra Show and participated.

I would like to thank the Committee who organised the Cattle Section as without their hard work the show would not be as successful as it was.

Jarrold Kelly (Agriculture Teacher)

In the News - James Ruse Agricultural High School

NORTHERN DISTRICT

Smart thinking bears fruit

Harvesting will be a peach after James Ruse students, teachers devise clever methods to protect orchard



James Ruse students Doris Wu, Eunice Cheng, Oliver Yau and Iris Fan enjoy a peach sorbet. Picture: Adam Ward

Steven Deare

A BUMPER harvest could be coming at the James Ruse Agricultural High School peach orchard, courtesy of some smart thinking.

Agriculture teacher David Pronger and students are working on a major project to better protect the orchard from weeds and pests, and reduce their labour.

The peach orchard is one of several on the 10ha farm, which also has cattle, sheep and poultry.

The school community often enjoys fruit, jam and sorbet from its annual harvest, but it has required hard work.

Mr Pronger said: "This orchard takes up a lot of time, so I looked at how I could make more efficiencies. We would spend hours weeding and using (herbicide) Roundup.

"And peaches are not easy to grow. They are prone to pests and diseases, so I've tried to refine things."

While the school used to spread nets over the plants, Mr Pronger said this only protected them from birds.

He and agriculture students

are installing fine-mesh fruit fly netting that will stop insects as well as birds.

The netting will be retractable, allowing bees to pollinate the plants in August.

Mr Pronger, farmhand Brian Rigg and students have laid down wet newspapers and mulch to prevent weeds from growing.

While this will eventually break down, the planting of gazanias around the peach trees will leave little room for weeds to flourish.

Mr Pronger said: "Rather than work harder, I'm trying to work smarter."

Year 10 student Eunice Cheng is one of those who has enjoyed working on the orchard.

"It's good to have the hands-on experience to put in practice what we've learned in class," she said.

"It teaches you general knowledge.

"We've learnt how newspaper retains moisture and can help us with our own plots. It's enjoyable and something you wouldn't usually do in real life."

The project will lead to fewer chemicals and less weeding, and hopefully more products like sorbet at the November harvest.

30/03/2017 NewsLocal digital edition - BRIGHT GARDEN FOR CAITLIN - 30 Mar 2017 - Page #9



Jane Hackett, Costa Georgiadis, Steve Malignity from The Australian Native Bee Company and James Stanton-Cooke (BeardsON).

BRIGHT GARDEN FOR CAITLIN

A LABOUR of love by the Pennant Hills High School community has resulted in a magnificent tribute to a former student.

Last week more than 80 students, teachers and parents joined together at Pennant Hills for the official opening of the Caitlin Hackett Memorial Native Garden.

Caitlin was a student who died of cancer in 2015. Her love of brilliant colour and art were combined in a native garden being planted complete with frog pond, rainbow serpent, bee hive and painted cow.

Caitlin's mother Jane and grandmother Margaret attended as well as those who were integral to the project including Pume Van Den Bempt and James Stanton-Cooke, from BeardsOn for Conservation.

"This is a new and special milestone for BeardsOn helping to support the school, students, staff and the broader community."

Pennant Hills High School

Barker College

More city kids embrace HSC agriculture



Jackie Chowns Published: February 25, 2017 The Sydney Morning Herald

Education special report

Brochures for agriculture study at Sydney's Barker College include images of rolling green hills and teens on horseback. Whether the bucolic shots are a drawcard is debatable. What's not is Barker's growth in students studying agriculture. Where there were four agriculture classes offered at the school in years 9-12 in 2007, now there are 15, including 68 students studying HSC agriculture this year.

Between 1300-1400 students across NSW each year sit the HSC agriculture exam. Scott Graham, Barker's head of agriculture, attributes the growth in student interest in part to Australia's highly technologically advanced industry and its relevance to students' lives.

"We impress on students the impact they can have in the world if they do something related to agriculture, since everyone needs food and fibre."

Students who graduate from agriculture at university level can move into careers as diverse as biosecurity, commodities trading, banking, carbon and water trading as well as animal sciences, grazing and farming. Graham estimates about 60 per cent of agriculture jobs are based in cities rather than in rural areas.

Year 12 student Jacqui Pienaar has been studying agriculture at Barker since Year 10. "It's a really content-heavy course but I like the practical work with animals most," she says. Students learn about viticulture, 21st-century farming, genetic modification, beef breeding, orchards and fruit, ethical eating, sustainability and international markets, among other course elements. Pienaar's future study is likely to take a more traditional route: she's aiming to enrol in a bachelor of animal science at UNE after the HSC and wants to run her own sheep farm. Other Barker students have diverse aims. "Some want to do more of a management role and working with the property, some are interested in creating new technologies for farming, others are interested in the business side," Pienaar says.

Pymble Ladies College principal Mrs Vicky Waters says her school has also experienced increased student numbers in high school and HSC-level agriculture.

"As a college, we are committed to sustainability. We believe the growing interest in agriculture stems from our students' passion for environmental stewardship and knowing where their food and fibre comes from," Waters says. "Students like studying agriculture because of its broad syllabus. It covers the science behind plant and animal production as well sustainable farming. It's also a hands-on course, with a 30 per cent practical requirement in workplace environments such as farms, which appeals to students who have a genuine interest in and passion for farming and animals."

The girls' school has offered agricultural studies since the 1950s, and HSC-level study since the early 1970s. The school's once-large cohort of regional students would have influenced the decision to begin the program. However, Pymble's day students are now among the majority studying agriculture.

The Australian: Eager early adopters say send in the drones



Samuel Marmulla and Sean Druitt with a drone. Picture: Hollie Adams.

PAUL CLEARY THE AUSTRALIAN 12:00AM March 10, 2017

Year 12 student Samuel Marmulla knows that remotely piloted aircraft, commonly known as drones, often get a bad rap. But the 17-year-old, who hopes to join the Royal Australian Air Force next year, is now a CASA-qualified drone pilot and he takes a worldly view on the immense potential for this technology in a big country like Australia.

Perhaps more so than any piece of technology, Samuel believes that RPA will transform the way many industries operate in this country, despite them being “stigmatised” of late.

Samuel is one of the first high school students in Australia to gain a certificate III qualification as an RPA pilot as part of his HSC studies, which means he can work as a commercial drone pilot

When asked about the potential of this new technology, he responds in a way that is so articulate and comprehensive that it's worth recording here in full.

"There are so many applications for drones. Real estate was pretty much its opening, taking aerial photos of houses and commercial properties. But if you broaden that you can go into mine sites having 3D maps of surfaces, heat signatures on the ground, you can pretty much map and survey the whole area," he explains.

"You can find where all the holes and pits are. From there you can go to fire safety and rescue. If you are looking for animals, heat signatures will find them. For lost people, if someone is lost in the bushland, you send a drone up with a heat camera. The heat signature is there, the GPS shows exactly where they are.

"There's cost minimisation, especially in farming. To send three people out in a tractor to look for lost animals or different grain density in a field, you stick a drone up there, you can find animals, the thickness of the growth. You can send a drone up every two weeks, it maps the area, you do comparison mapping that shows your growth over time. You are looking at your yield and what you can and cannot get from different properties."

Samuel was one of nine students at Callaghan College Jesmond Campus in NSW's Hunter Valley who gained a formal qualification last year to fly RPAs. The qualification is formally known as a certificate III in aviation (remote pilotvisual line of sight). CCJC is Callaghan's senior campus and offers a wide range of applied courses, in addition to the standard range of HSC subjects.

The school was the first in the state to offer the course, but this year it has been joined by eight others. Significantly, all of the schools running the program are based near farming and mining industries in regional areas.

While the students at CCJC have been raised in a region hit by the loss of manufacturing and now the mining downturn, the students at the school talk with great optimism about what they can achieve now that they've become qualified to fly RPAs.

Technology and teenagers are often seen as a negative combination that involves spending too much time indoors with eyes glued to computer screens or video games. But the experience of these students, and many others around the state, shows the difference that RPAs make given that they are outdoor devices.

These students show they understand technology and what it can achieve, and that they've already gained a professional qualification that will put them on the fasttrack to secure the jobs of the future.

Ryan McDonald, 17, who also qualified last year, says he thinks he'll be able to find part time work as a drone pilot while studying at university in coming years. He believes that he will be able to use his drone piloting skills in his future career as an engineer, and that he may be able to program them as well.

"I just thought this would be the way to go in the future and it gives me a certificate coming out of school," Ryan says.

While the certificate III qualification is an HSC subject, the marks won't count towards university entrance.

However, Ryan thinks the opportunity to gain a qualification made it a compelling course. Ryan praised his teacher Sean Druitt, who is also an RPAqualified pilot, and was able to run the course. Ryan says that Druitt is a "top" pilot who puts much emphasis on safety. Druitt is convinced that the applications of drone technology are immense in Australia. He has also seen it in his own family, which is investigating the use of drones on its farm near Forbes.

The course at Callaghan came about after a local company, UVAIR, proposed the idea to the school in early 2015, and the two then worked in partnership to gain the Department of Education's approval, said UVAIR general manager Ashley Cox. They managed to get the course through the approval procedures with impressive efficacy, given the long periods usually associated with new courses.

By the end of 2015 the school and UVAIR were selecting the first group of Year 10 students which completed the course last year. This year, there are 21 in Callaghan's RPA course while UVAIR is now running courses at eight other schools around the state. Out of the 115 students enrolled this year, 11 are female.

The timing of these courses is impressive given the rise in both the number of CASA approved operators and pilots. CASA figures show that the number of operators, which are the commercial entities that employ pilots, almost doubled last year to reach 743. At the same time, the number of approved pilots has increased from 1500 in 2015 to 2043 last year.

Samuel agrees that the use of RPAs will face more regulation, but he stresses that it is important for people to realise this technology's full potential in a country like Australia.

"The word drone is very stigmatised. People see it as a negative connotation," he says. "If people were more educated in how drones are being used, and can be used, (they'd realise they're) not for bad things but a whole lot of useful purposes than people make it out to be.

For the moment, however, he has his eyes fixed on a career in the RAAF, and he believes his RPA qualification can only help.

Initially, he had wanted to be a fighter pilot and fly the fifth generation F35 joint strike fighter, but now he realises that flying transport aircraft will give him a much wider set of skills down the track. And he thinks his drone skills will come in handy in the RAAF.

"I originally wanted to get into the air force. This is a similar field. In the air force you have a lot of drones surveying ships. Even if I don't get into piloting, even if I was in the air force I'd be surveying areas. You do a lot of things with drones, you can do anything."

UVAIR's Cox says the successful course at CCJC has prompted other schools to take on the program, while state governments in Queensland, South Australia and Western Australia have expressed interest in doing the same.

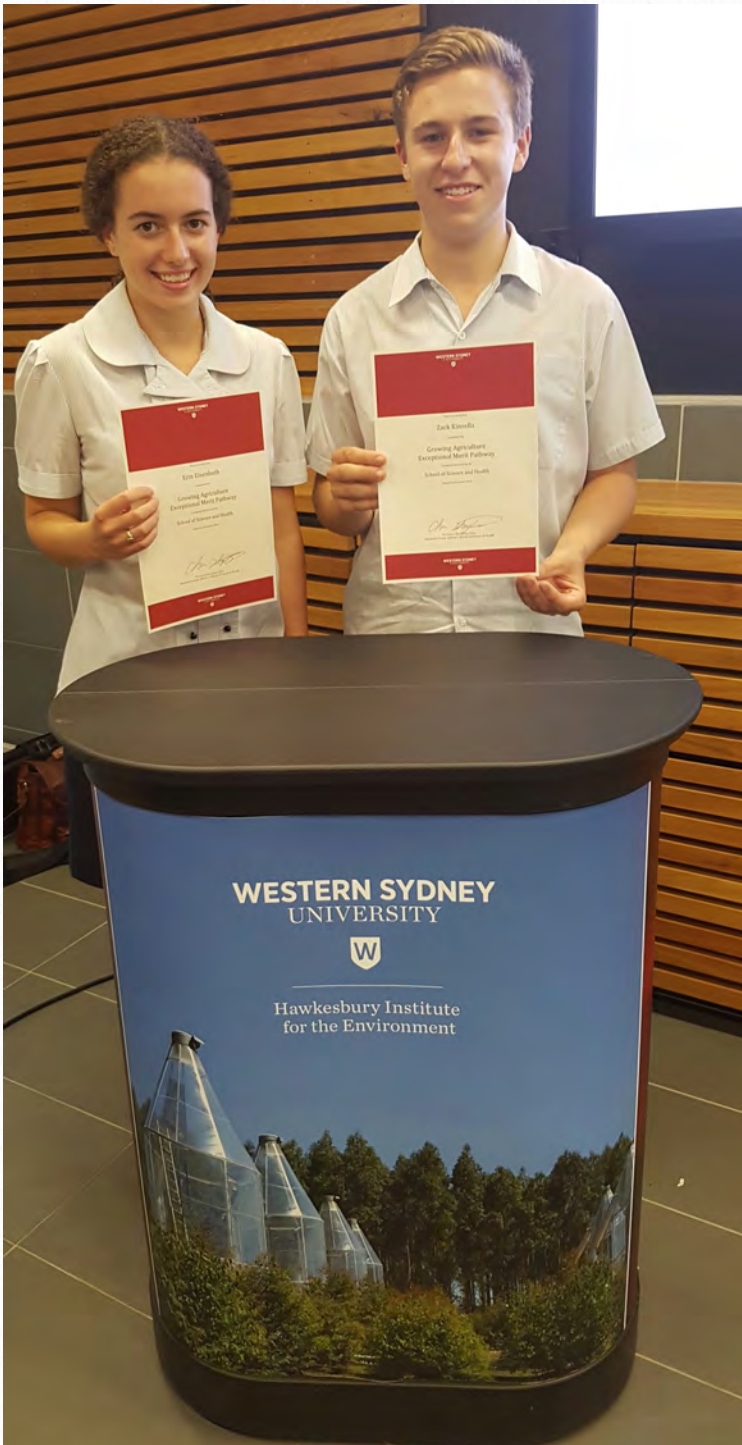
The eight other schools in NSW running the course this year are Newcastle's Whitebridge High School and St Phillips Christian College; Hunter River High School; Lithgow High School; Narrabri High School; and three schools from the Tamworth region, Tamworth High School, Peel High School and Farrer Memorial Agricultural High School.

Each school runs a class of about 15 students, though Callaghan has 21 this year.

UVAIR is paid per student to run the course. The delivery is fairly labour intensive given that the company has to provide direct instruction in all of the schools except Callaghan. And the distances to reach some of the schools is considerable. In the case of Narrabri, the instructor flies a light plane to get there.

The course involves 240 hours of instruction over the year. Each school has found its own way of running the course. Some run it as a full or half day, others divide it into periods. As interest grows around the country, Cox thinks that next year's program could involve as many as 40 schools around the country.

Western Sydney University, Hawkesbury Exceptional Merit Pathway



Western Sydney University's Exceptional Merit Pathway (EMP) program is kick-starting the next generation of agriculture professionals. The EMP takes selected year 11 students through a project-based learning experience, designed to open their minds to the vast range of opportunities in the agriculture industry. Through a series of online modules and practical fieldwork tasks, EMP students craft their own solutions to real world problems such as food deserts, urban development, and food illiteracy.

Students who successfully meet assessment requirements of the EMP receive an early, non-conditional offer to study the Bachelor of Sustainable Agriculture and Food Security degree at Western Sydney University upon completion of their Higher School Certificate.

**Pictured - Erin Eisenhuth and Zack Kinsella
Marian Catholic College, Kenthurst.**

Congratulations to Arndell College, Bede Polding College, Cranebrook High School, Hurlstone Agricultural High School, Model Farms High School, Oakhill College and Marian Catholic College, Kenthurst for students successfully completing the EMP pathway in 2016.

For more information on the EMP or any other [Western Sydney University](https://www.westernsydney.edu.au) school engagement opportunities, please contact Chris Vella (ph: 02 4570 1567) or April Browne (ph: 02 4570 1192).



Another year begins at Yass HS down on the farm and first up Year 10 went out to 'Cowridge' to check on the ewes that will be part of our AI program this year. Students got in some drafting practice as well as fat scoring while we were at it.

We have soon all our two-tooth rams from last year to local producers at an average of \$500 per head and will be soon seeking buyers for the 2016 drop We were pleased to be able to supply rams to some of our schools this last few months with Griffith HS and Brisbane Waters Secondary College taking delivery of rams and some young ewes.

A major focus of the term has been the Royal Canberra Show where we exhibited three steers and a Limo heifer with some success.



No start to the year would be complete without the Year 7 and 8 Technology Mandatory Ag classes getting stuck into their new garden plots and the inevitable chicken project with students eagerly marking their chicks for easy identification.

As the year 10 students get ready for the AI program we also turned our attention to the young rams and they were very capably shorn by two of our Year 10 boys who both show alot of potential as shearers in the future.



Mitchell Bush has a big future as a shearer.

We have entered the RAS Pig Hoof and Hook competition this year and Mr McDonald is guiding one of the Year 9 classes through the management and feeding of the three pigs we took delivery of in early February.

Already they have reached daily weight gains of just under 800 g per day and look set to make the 60+kg weight target in good time for the Royal Easter Show.



The recent hot weather has required some hosing down and this is usually followed by a soothing belly rub.

An unexpected addition to the school farm was a hatching of ducklings by three of our female ducks. A dozen ducklings hatched out under the three ducks and have settled in very nicely with all three mothers doing a shared job of looking after the brood.



All three steers won either first, second or third place ribbons in their classes and the First Placed Square Meater steer gaining Reserve Champion School Steer.

Most of the Show Team gained places in the parading competition and Elysia McKay was placed 4th overall in the 15's Junior judging.



Kelsey Medway stands our Square Meater steer up for the judge Mr Greg Ball while he speaks to the choice he made putting the steer in Reserve Champion School Steer.

The steer later sold for \$3.62/kg in the RNCAS auction.

Phil Amour (Agriculture/Primary Industries/Work Studies/Science Teacher)

Pennant Hills High School Bee There or Bee Square!



Photo Credit - Michael Bianchino

Despite the wet weather, there was a buzz in the air as over 80 students and the school community joined together at Pennant Hills High on Sunday morning 19 March 2017 for the opening of the Caitlin Hackett Memorial Garden, which included a fly-in visit from Mr Costa Georgiadis, host of ABC's Gardening Australia.

The event celebrated the establishment of a native garden in the school courtyard complete with frog pond, Indigenous Rainbow Serpent, installation of native Australian stingless bee hive and a life-size painted cow.

It was the culmination of work by students, teachers and the P&C to honour student Caitlin who lost her brave battle with cancer in 2015. Caitlin loved cows, loved colour, loved art and just wanted to be remembered according to her friends who celebrated the fitting tribute.

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The garden was the combined inspiration of students, including the steam engine behind the project Pume Van Den Bempt and the schools PEAS team (Penno Environmental, Agricultural and Sustainability team) and Mr James Stanton-Cooke, Co-founder of [BeardsOn](#) for Conservation (a not-for-profit environmental organisation) who worked together to create a special space for students to reflect on life and the importance of the environment.

James Stanton-Cooke said, “We are honoured and privileged to be part of regenerating this special patch of earth and installing a native bee hive that will allow for people to connect, reflect and heal in their own way, in a newly constructed green community space.

“This is a new and special milestone for BeardsOn helping to support the school, students, staff and the broader community”, Mr Stanton-Cooke said.

Attendees enjoyed a reception from Principal Mr Ross Warren, Welcome to Country by Indigenous student Liam Fogg and heartfelt speeches by representatives of the Student Leadership Council and friends of Caitlin including Pume Van Den Bempt, Kalindi White, Tabitha White, and Brad Thomson.

Mr Steve Maginnity, of [The Australian Native Bee Company](#) who installed the stingless native social bee hive, gave an educational presentation on *Tetragonula carbonaria*, which he described as ideal pets that live for just 50 days, travel no more than 500 metres, and will not leave their hive in temperatures below 18C or above 35C.

After the opening of the garden gate by Caitlin’s Mum Jane and grandmother Margaret, supported by family members, Mr Costa Georgiadis, host of ABC’s Gardening Australia, was the surprise keynote speaker.

He gave a passionate, tree-hugging address about the importance of the humble bee to humanity and the significant role bee hives and green space can play in schools and an increasingly busy society.

The event wrapped up with a morning tea and the planting of more native saplings generously supplied by Mr Ross Rapmund of the Hornsby Shire Council Community Nursery, who was a past student of the school and provided important advice on the project.

Cheltenham resident Mr Michael Bianchino said, “It was the most amazing environmental, humanitarian, moving, culturally diverse, empathetic and compassionate memorial I’ve ever attended in the local area. What we experienced was a snapshot of how great Australia can be. Words and pictures don’t do it justice”, Mr Bianchino said.

James Stanton-Cooke of **BeardsOn** is keen to hear from other local schools who would like to be part of their “Trees for Bees and Bees for Trees” grant program and can be contacted on info@beardson.org

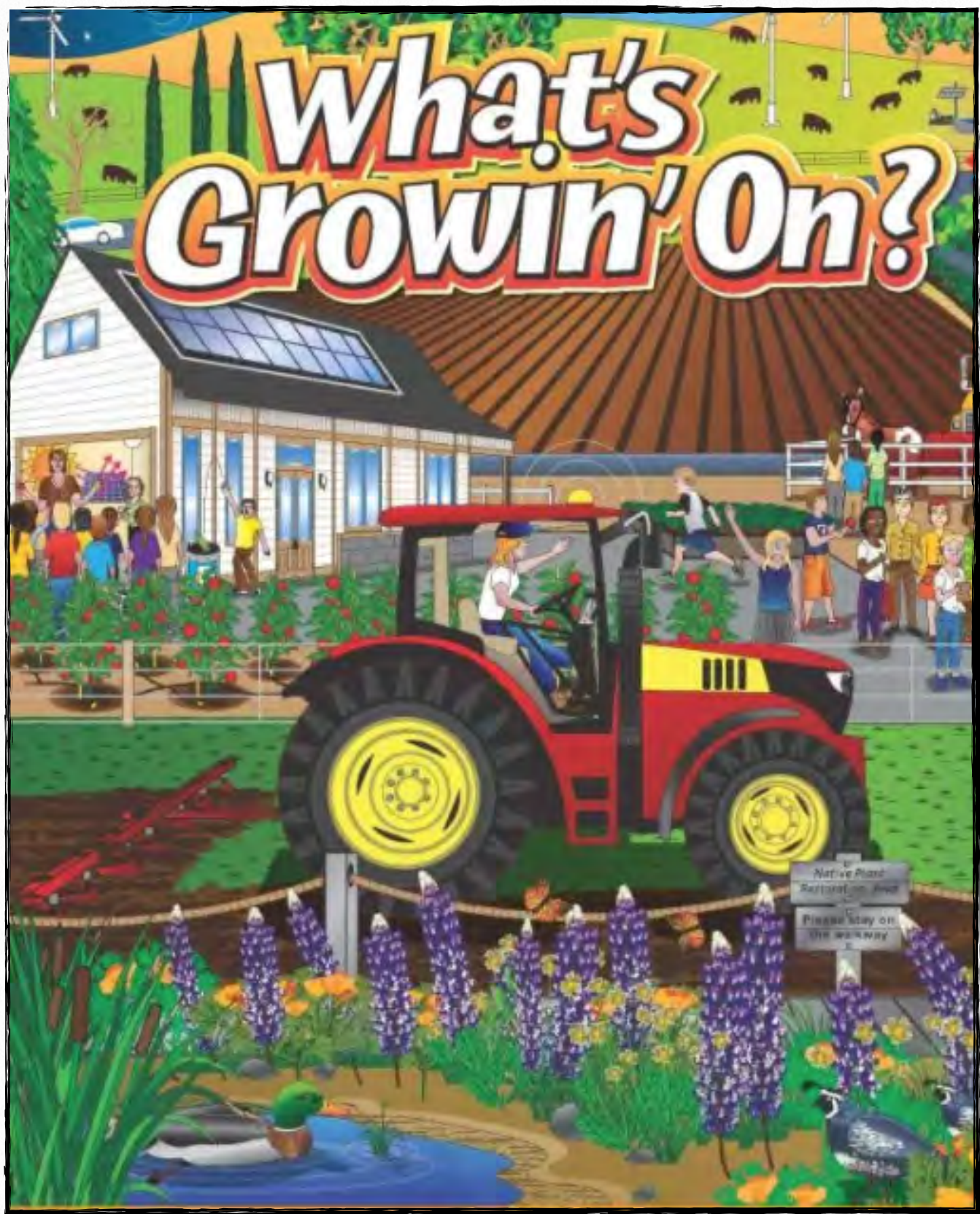
Editors Note - Steve Maginnity (Australian Native Bees) is also an Ag Teacher at Alstonville High School.

James Stanton-Cooke (BeardsOn) is also PDHPE/Ag Teacher at Pennant Hills High School

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What's On?

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



Hunter HSC Seminar Day

26th May 2017

The Singleton High School HSC Seminar Day is held at Singleton High School each year on the last Friday in May.

Over 1000 Year 11 and 12 students representing over 30 schools from Narrabri, Merriwa, Lake Macquarie, Newcastle, Taree, Wauchope, Maitland and Central Coast areas will attend HSC Seminars in Singleton. The Singleton High School HSC Seminars have attracted over 40 experienced teachers including: Educational consultants, Senior HSC markers, HSC markers, University lecturers and Board of Studies staff from across the state. This highly experienced group of presenters will ensure the very latest HSC content and exam technique information is afforded to those students in attendance.

Students will be able to attend seminars covering more than 30 HSC courses, which will focus on preparation for the HSC exams later in the year. The seminars will be held in thirteen venues in Singleton from 9.50am to 5pm, with the cost for the day being only \$55.

The seminars have resulted from the great efforts of Singleton High School Staff and Student Representative Council; support from the NSW Department of Education; the Singleton Community and both local and regional business sponsorship.

The Singleton Educational Community has hosted the Seminar Day for over 16 years. Last year was highly successful with over 900 students benefiting from the expert knowledge and advice given to them on the day.

Schools or individual students wishing to participate in the HSC Seminars can register by contacting Singleton High School on 6571 1199.

Ian Skilton
for the organising committee.

Deputy Principal
Singleton High School
75-81 York St, Singleton NSW 2330
Ph:02 65711199/Mb:0407713593/Fax:02 65724889
ianbruce.skilton@det.nsw.edu.au

AGRICULTURE HSC SEMINAR

Spend a day on valuable revision and case studies of current research for the HSC Agriculture courses at the University of Sydney's **Agriculture HSC Seminar**.

Held on the Camden campus on **Thursday 15 June 2017**, from 9.30am until 2pm, the day revises key concepts in the HSC Agriculture courses and provides current examples of research that students can use in the extended response answers.



Hear directly from researchers in the University of Sydney's Faculty of Agriculture and Environment and Faculty of Veterinary Science as they explain their research in a series of lectures, with the relevant HSC Syllabus areas explicitly noted for each talk.

You have the choice of attending the seminar in person on the Camden campus (\$7 per student) or joining through DART connections (free of charge).

Lunch is provided and the day also includes an information session on the exciting range of degrees available in the Faculties of Agriculture and Environment, Veterinary Science and Science.

For a riveting day of revision and remarkable research, join us for the Agriculture HSC Seminar.

Registrations

Registrations for the 2017 Agriculture HSC Seminar will open in early 2017.


Agriculture HSC Seminar 2017

University of Sydney, Camden Campus
Location: Liz Kernohan Conference Centre,
410 Werombi Road, Camden, NSW

Date: Thursday 15 June 2017

Time: 9:30am-2:00pm

Cost: \$7 per student (includes BBQ lunch, course notes and workshop materials)

	<p>Sydney Showground, Sydney Olympic Park</p> <p>Thursday, 27 July 2017</p>
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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.

AgVision goals:

- Encourage young minds to become the future of agriculture in Australia Showcase a diverse range of agri-based career pathways
- Allow students to experience agricultural trades, agri-business and services in a practical learning environment
- Promote an awareness of appropriate study patterns required to negotiate agri-career pathways and School-based Apprenticeships and Traineeships
- Build networks between youth, industry, educators and the wider agricultural community

To express your school's interest in attending please email education@rasnsw.com.au

HAWKESBURY SHOW 2017

BEEF CATTLE HOOF & HOOK COMPETITION

(Beef Steer/Heifer & Carcass Competition)

Major Sponsors:



Hawkesbury Valley Meat Processors

Other Sponsors:

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NORTH WESTERN SURVEYS

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CHIEF STEWARD: Frank Fava

STEWARD: Mr. G Ridge, Mr. P Powe, Mrs. S Powe

AUCTIONEER: Mr. Don Malcolm

Other Sponsors:



CONDITIONS OF ENTRY:

The decision of Stewards on all matters pertaining to the competition shall be final and conclusive and binding on all nominations for the competition.

The Committee reserves unto itself the right at any time, without being liable, for any loss or damage which may be sustained.

Every care will be taken of the Exhibits, but the Committee will not be responsible for any damage, accident, loss or death.

There will be the option of a private kill available. This option must be nominated at time of entry or before the live auction.

CONDITIONS:

- All cattle must have a National Livestock Identification System (NLIS) device fitted & will be scanned.
- All exhibitors must sign & lodge a Risk Warning/Indemnity & Health Declaration (forms attached) http://www.farmbiosecurity.com.au/wp-content/uploads/2016/10/NATIONAL-CATTLE-HEALTHDECLARATION_fillable_251016_FA.pdf
- All cattle must be free of infectious disease
- All cattle will be transported to Hawkesbury Valley Meat Processors (HVMP) following the auction.
- All cattle must be milk tooth only, cattle will be mouthed at point of weighing • Open to all breeds or cross breeds of cattle.
- All cattle entered into the competition shall not exceed the maximum live weight of 480kg, any cattle that exceed the weight limit will be disqualified and will not be eligible to participate in the competition and also will not be eligible to be sold at the auction.
- If the animal is deemed ineligible for the competition then the exhibitor/s of the cattle must make other arrangements.
- All led cattle must be restrained by nose ring or nose grip
- For the purpose of this competition Hormone Growth Promotants (HGP's) are not permitted.
- The Competition will be conducted in TWO parts, beef (live) and beef (carcass)

ENTRIES CLOSE at 4.00pm on Friday, 28th April 2017, with the Secretary, HDAA, P O Box 382, Richmond NSW 2753. **LATE ENTRIES WILL NOT BE ACCEPTED.**

➤ **ENTRY FEE:** per animal, \$33.00 (all fees & prizes include GST)

➤ **PRIZES:**

For each class / weight division:

- **Hoof** – 1st \$50.00, 2nd \$30.00, 3rd \$20.00 & Ribbons (unless otherwise stated)
- **Hook** – 1st \$50.00, 2nd \$30.00, 3rd \$20.00 & Ribbons

*There must be three entries in a class or second prize will not be awarded and in the event of the Judge deciding that the exhibit in any class is not worthy of a prize, no prize will be given (to be left to Judge's Discretion).

* Ribbons will be awarded during the competition. Prize money will be able to be collected at the conclusion of the event from the Show Office.

- **Hoof -**

CHAMPION ON THE HOOF - \$200.00 & ribbon

RESERVE CHAMPION ON THE HOOF - \$100.00 & ribbon

CHAMPION SCHOOL'S EXHIBIT ON THE HOOF - \$300.00 plus

Western Sydney University (Hawkesbury) Perpetual Trophy & plaque & ribbon

- **Hook -**

CHAMPION ON THE HOOK - \$200.00 & ribbon

RESERVE CHAMPION ON THE HOOK - \$100.00 & ribbon

HIGHEST YIELDING CARCASS - \$200.00 & ribbon

All Prize money MUST be collected before 31st May 2017

➤ **JUDGING and AUCTION DAYS**

- **Live Judging-** at Hawkesbury Showground, Cattle Lawn on **Saturday, 6th May 2017 at approx. 1.30pm.**
- **Auction** – will take place on **Saturday, 6th May 2017, commencing at 3pm** in the Cattle Yard at the Showgrounds, 40 Racecourse Rd, Clarendon.
- **Carcass** - Judging presentation, carcass inspection will be at Hawkesbury Valley Meat Processors on the evening of **Tuesday, 9th May 2017.** (HVMP 62 King Rd, Wilberforce NSW 2756 - time will be advised during Show).

➤ **CLASSES**

Led Cattle:

(must be delivered to Hawkesbury Showground before 8.00am on Saturday, 6th May 2017.

- a feeding curfew should apply from 9:00pm Friday, 5th May 2017).

- **HH1** Light weight 280 – 375 Kg live weight
- **HH2** Middle weight 376 – 450 Kg live weight
- **HH3** Heavy weight 451 – 480 Kg live weight

Non Led Cattle:

(must be delivered to HDAA Cattle Yards between 6:00pm-9:00pm on Friday, 5th May 2017 - a feeding curfew will be enforced at 9:00pm Friday, 5th May 2017)

- **HH4** Weight 280 - 480Kg. Cattle will be judged in three weight divisions with prizes for each division.
 - Light Weight 280 – 375 Kg live weight
 - Middle Weight 376 – 450 Kg live weight
 - Heavy Weight 451 – 480 Kg live weight



Show Dates



Date	Show	Show	Show
April 2017			
1st April	Batlow Show		
6th to 19th April	Sydney Royal Easter Show		
17th April	Jerrawa Show		
21st - 23rd April	Gunnedah Show		
21st - 22nd April	Wauchope Show	Stroud Show	
25th - 26th April	Kempsey Show		
28th - 29th April	Moree Show	Bonalbo Show	Macksville Show
28th - 30th April	Bathurst Royal Show		
29th - 30th April	Central Coast Regional Show		
30th April	Woodenbong Show		
May 2017			
2nd to 3rd May	Macleay Show		
5th to 6th May	Gilgandra Show	Grafton Show	
5th to 7th May	Hawkesbury Show	Narrabri Show	
11th - 13th May	Wyallda Show -		
12th - 14th May	Coffs Harbour Show -		
13th May	Bourke Show		
13th - 14th May	Walgett Show	Orange Show	
16th May	Yeoval Show		
19th - 20th May	Cobar Show		
20th - 21st May	Bellingen Show	Wee Waa Show	St Ives Show
20th May	Wellington Show		
21st - 22nd May	Nyngan Show		

Date	Show	Show
June 2017		
3rd June	Gulargambone Show	
10th June	Warren Show	
August 2017		
11th - 12th August	Tullamore Show	
12th - 13th August	Mungindi Show	
15-16th August	Trundle Show	
19th August	Ganmain Show	Bedgerabong 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	



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NSWAAT BGM 12/01/2017

Meeting Opened: 8.40am

Present: C Chirgwin, J Connors, J Kelly, G Price, T Butler, D Giblin, P Kendal, E Paul, A Ajuyah, K Horley, C Atkins, M Reedy, A Greenwood, K Herwig, E Soall, S McNeill, L Harris, D Saxon, L Ruis, G Smith, D Beale, D Bunn, N Dwyer, N Simmons, J Smith, P Smith, B Bowman, A McGeary, M Holland, S Lehman, G Harris, D Chadwick, E Date, B Callum, L Amor, T Henry, V Gett, K Sherwood, A Moore, N Sibbald, D Alexander, N Shankellton, R Ashhurst, J Killen, S Van den Berge, E Dagher, C Duver, H Mahoney, N Westerhof, G Quintal, J Phillips, K Hotson, S Gray, S Smedley, J Young, B Middleton, L Griffin, J Caines, L Mesiti & M Melino (60)

Apologies: T Barnett, S Hemmings, E O'Neill, TJ Ireland & S McGinnity (5)

Minutes read from last minutes were given to all to read

Moved: G Harris

Seconded: J Kelly Carried

Business Arising: None

Secretary Report: Had limited voice. However, secretary worked on having the NAAE and NSWAAT Conferences approved as accreditation hours and kept aspects of the association in line with PTC requirements.

Presidents Report:

2017 NSWAAAT Biennial Conference Sydney

Wow, what a show this Sydney committee has put on for us... Where do I start??? I guess it all started this time 2 years ago when Nicolet and a few others volunteered the Sydney branch to organise and run the conference. Since then, over many a meeting, several hundred phone calls and copious discussions, look what they have delivered. Simply brilliant! It's hard to go through all those who have helped organise and run this event as I'm bound to forget or leave someone out, so instead I'll recap what great achievements these guys have produced.

- Farming on the Fringe: What a great opportunity to network and learn from each other and those industry professionals who have come to entertain us.
- Sponsorship: As Luciano discussed on Monday, this conference has been heavily sponsored by various active and very generous companies around the area, who are clearly interested what we do. Agricultural Education! Companies such as Kubota and the Royal Agricultural Society have really helped pitch in to keep the costs down and the engagement up.
- Facilities: What a great venue! The Lodge, RAS and the two bus tours were fantastic. I always get nervous coming back to Sydney, with the variables such as traffic, crowds and the humid weather, but this has been great. Very comfortable.
- Monday's seminars were very informative. As were the two bus trips visiting local universities and farms.

We've covered

- Technology (Robots, Drones etc)
- Teaching and management strategies (STEM)
- Plants and Animals (Nutrition, Marketing, Biosecurity and quality control)

It's almost like they have printed off the syllabus and said.... We need to cover as much of these as possible... FANTASTIC...

- Now I can't talk about the conference without a special mention of the social gatherings. How good was the beef at the Dinner of Champions... And Erin's dance to the song "The devil went back to Georgia". And have a look at this setting... Unreal.
- I really would like to show my sincere appreciation towards the all of the organising committee.
- Towerless hours of preparation organising and reorganising and double checking things are in place
- What a fantastic effort accommodating all our needs and demands, ensuring everything run smoothly within the specific time schedules.
- I believe the proof is in the pudding... With 84 delegates attending the conference out of our growing membership tally of 202 members. A fantastic effort. Well done

Here's a little joke to soften the speech a little: Three farmers get into a regular taxi. Which one is the smartest? The one in the middle. He doesn't have to open any gates.

- It's been a busy two years for me, since becoming NSWAAAT President, I've also become captain of my local fire brigade, stepped in and out of exec roles at school, bought a farm and slowly working towards building a herd of black cows... oh yeah, nearly forgot, and had my 4th child... She does take up some time,,, looking forward to regular sleep pattern sometime in the near future I hope.
- It's been busy on the NSWAAAT front too;
- HSC seminar days
- ECT conferences
- Attending the NAAE conference in WA, Spending time with our fellow colleagues around Australia was great experience with lots of knowledge being absorbed by the 17

New South Welshman. The next NAAE conference will be in Tasmania in 2018 and following one in Armidale NSW in 2020.

- Consultation of the Tech Mandatory syllabus
- JA Sutherland and Life membership Awards....
- Prior to our next conference we need to think about our nominations towards the 2 main awards.... If you could give this some thought so we can get things underway over the next year, ready for the 2019 Conference.
- 2019 Conference has been discussed with a few possible regions over the last few months, and it appears we have a few members from the central west who are happy to host the conference. Looks like it will held at Forbes in January 2019 so get your Elvis suits ready...
- Speaking of conferences, don't forget we are all welcome to attend the National conference in Tasmania & I can't wait. I plan to take my family on a road trip a month early.
- It is NSW's turn to run the National conference in 2020 so think about a few ideas for that too. At this stage, we're looking at UNE to possibly host it in Armidale.
- BOSTES requirements: As you are aware, this conference has been accredited for 29 registered hours. I also understand many of you have not yet converted across to the new scheme. I'm looking into how we can link this 29hrs to your accreditation when you get it, so keep in touch.

Finally I'd like to publicly thank my executive for all there help and dedication over the past 2 years.

- Carl has been exemplary as usual, always having his finger on the pulse, ready to retrieve that, compose this, organise that for this date etc. And keeping us on task.
- Ian working with the ICT and web pages, keeping things running smooth.
- Graham is the "Buzz light year" of the team to infinity and beyond.

- Graham has not only managed the state books and kept our money in perfect order
- He has also managed the money and delegates for this biennial conference on behalf of the Sydney branch.
- While also being my middle man and integral link between the state executive and the Sydney branch's organising committee. Making sure we know what's going on, who is doing what, whether we need to up our insurance or adjust our plans etc.
- Managing and keeping our active and financial members up to date, while also managing the Facebook page.
- He is the king of plan b, c, d and e. After Erin had to resign from her BAAT editor position due to personal commitments, Graham was there. Not only did he achieve the BAAT deadlines, he produced a fantastic product time and time again. Especially, considering we had double the BAATs produced over the past 2 years. A real professional.

Thankyou.

Justin Connors

President 2015-2017

Moved: J Connors Seconded: K Hotson

Carried

Treasurers Report:

The Association finances are healthier now compared to this time 2 years ago. Two factors have contributed to this.

- BAAT is no longer being printed and distributed by PTC and this has represented a saving of around \$4,500 per annum.
- Membership has grown steadily over the 2 years.

Comparing where we were at the end of the 2015 Biennial conference and where we are projected to be following this Conference, the NSWAAAT Bank account should have increased by more than \$11,000.

NSW Association of Agriculture Teachers Balance Sheet

NSW Association of Agriculture Teachers Balance Sheet		
	2015	2016
Opening Balance	33469.37	17735.75
Income		
Membership	6700.00	8430.00
Conference Registration	2630.00	35310.00
Conference Sponsorship	500.00	12000.00
Copyright Agency	651.10	1074.48
HSC Study Day	0.00	1760.00
Bank Account Interest	1.71	2.52
Total Income	10482.81	58577.00
Expenditure		
NSWAAT Biennial Conference Costs	16828.25	13752.00
NAAE Conference Costs	650.00	0.00
BAAT / PTC Secretarial Services	4207.12	0.00
Affiliation Fees (PTC and NAAE)	2640.00	2284.00
Business Insurance and other Costs	1000.00	0.00
Refunds / Reimbursements	781.66	449.97
Meetings / Tributes	40.00	0.00
Worldskills Sponsorship	0.00	770.00
Web Hosting / Web Authoring Software	63.40	102.00
HSC Study Day	0.00	1929.65
Bank Account Fees	6.00	0.00
Total Expenditure	26216.43	19287.62
Closing Balance @ 31 December	17735.75	57025.13

Technology/BAAT Report: BAAT, in the electronic form is an easier and less expensive platform for composition and dissemination. Hyperlinks mean that much broader scope is easily accessed. General consensus from feedback has been that 4 editions per annum is ideal and the electronic copy is easier to use, especially when printing is required

Moved: G Quintal Seconded: J Kelly Carried

General Business:

- 1. Retired Members

Discussion that retired members still pay \$60/year. Proposal that retired members can have the following options

a) Pay \$60/year as usual and keep voting rights and all member rights

b) Not pay \$60, have no voting rights and become an honorary member with all other entitlements.

Moved: J Connors Seconded: N Westerhof

Carried

2. HSC Agriculture Examination

Justin Connors spoke of the imbalance of the allocation of marks. David Randall spoke of how the examination is set up and that the NSWAAAT should write a letter to BOS (now

Moved: D Randall Seconded: K Hotson

Carried

3. University Papers

Lara Griffin from Pittwater HS can help with obtaining university papers for the experimental parts of the course.

4. Farm Assistant Recognition Award

Tony Butler spoke that the NSWAAAT should award hard working and supportive Farm Assistants that have completed 5 years of work in the one school. Teachers/schools will be sent a template to nominate their Farm Assistant so the trophy can be presented correctly.

Moved: T Butler Seconded: G Price

Carried

1. Upskill Assistance

Mick Melino asked if NSWAAAT can assist with upskilling Farm Assistants on a regional basis. Ivan Gant spoke that Asset Management (Alan Smith) could assist with DET Schools.

2. World Skills

Carl Chirgwin thanked the NSWAAAT for sponsoring the NSW Worldskill Representatives their shirts for 2016. NSW was placed 1st (Sam Carthy Red Bend CC), 2nd (Jake Cracknell McIntyre HS) & 3rd (Sarah Targett Yass HS) in the National Worldskills event held at Melbourne Showgrounds.

In 2017 – Michael Clancy and Ivan Gant are driving the concept from a DET perspective and would like as many schools to become involved as possible. It is run as a schools competition, then regional and then a state final (Forbes) before the National Competition will be held in Sydney in 2018. All the competition requirements are fully funded – release, travel, accommodation etc.

They are also insisting that the VETiS goes beyond the National finals and goes into the Global Worldskills event which would be Tokyo 2021.

3. Life Membership & JA Sutherland Nominations

No one was nominated. Asking for the Life Membership and JA Sutherland Award process to be placed in next BAAT with some recent recipients so members understand the process much better.

4. Conference Review

A survey monkey will be sent in regards to reviewing the Sydney 2017 Conference to assist with improving the next one and for teachers to receive their accreditation hours for 2017.

5. 2019 Conference

Central West NSW

Moved: G Price Seconded: J Kelly

Carried

1. Technology Syllabus Assistance

What can we do for non-trained teachers?

Please pass on already created units (D Randall). Pass on resources/ideas.

BOS creating an Urban Agriculture unit for Stage 4 (G Quintal).

Remember that it's the education authorities to assist with the training. NSWAAAT can provide resources and speakers to assist them (G Harris)

PD Workshops run as accredited courses by NSWAAAT personnel on a regional basis. Could be even just once a year (J Caines)

Access and communication – how to we get into all areas? (L Mesity) – Possible solution is the use of the PTC All Schools Mail Out (C Chirgwin)

Principal emails (C Ralph – SAAG)

Sue Smedley from Wagga Wagga Christian College said that just this conference and our NSWAAAT was very supportive as she is teaching Stage 4 Ag without any training.

Google search terms paid for (Lara Griffin)

TAFE Online (Fiona Watts)

Google Suite (Evan Paul)

For executive – this area needs to be sorted in a rather fast manner

1. Webpage

New one is needed. Pay for it to be done so it is computer and smart phone friendly.

Moved: L Griffin Seconded: N Westerhof Carried

2. BAAT Options

G Quintal spoke about what people think of it being electronic. A lot of people commented that it was great being electronic as easier to go straight to links etc. J Connors concern that it was once a term. Maybe have it twice a year. Information from its members is needed. Any school resources would be appreciated. Four times a year and electronic will remain.

Moved: G Price

Seconded: E Paul Carried

3. Chemical Training

Graeme Harris spoke of how he is conducting Chemical Training courses for all those out there who may need it.

All Positions Declared Vacant

T Butler – Presiding Officer

K Hotson – Presiding Administrative Officer

President:

Luciano Mesiti (Colo High School)

Nominated: Ivan Gant, Seconded: Mick Melino – Accepted and Congratulations

Vice President: (To assist with President's duties)

Jennifer Caines (Mt Annan)

Nominated: Georgina Price, Seconded: Ivan Gant – Accepted and Congratulations

Secretary:

Georgina Price (Parkes High School) – Declined nomination

Carl Chirgwin (Griffith High School)

Nominated: Justin Connors, Seconded: Jade Smith – Accepted and Congratulations

Treasurer:

Graham Quintal (Retired at Beecroft)

Nominated: Mick Melino, Seconded: Justin Connors – Accepted and Congratulations

BAAT Editor:

Graham Quintal – Declined nomination

Sky Van den Berge (Marian College, Kenthurst)

Nominated: Justin Connors, Seconded: Robbie Ashhurst – Accepted and Congratulations

BAAT Assistant:

Robbie Ashhurst (James Ruse Agricultural High School)

Nominated: Sky Van den Berge and Seconded: John Kileen – Accepted and Congratulations

Communications:

Lara Griffin (Pittwater High School) for the Webpage with Evan Paul (Hawkesbury High School) to assist.

Georgina Price, Graham Quintal & Carl Chirgwin for Facebook Administration

Phil Armour (Yass High) for Edmodo – this to be transferred to Evan Paul at a time suitable to Phil.

Email Network List to be managed by the President and Treasurer.

Nominated: Carl Chirgwin, Seconded: Lucanio Mesiti – Accepted and Congratulations to all

SAAG

John Killeen (Bossley Park High)

Kristina Hotson (Camden High School)

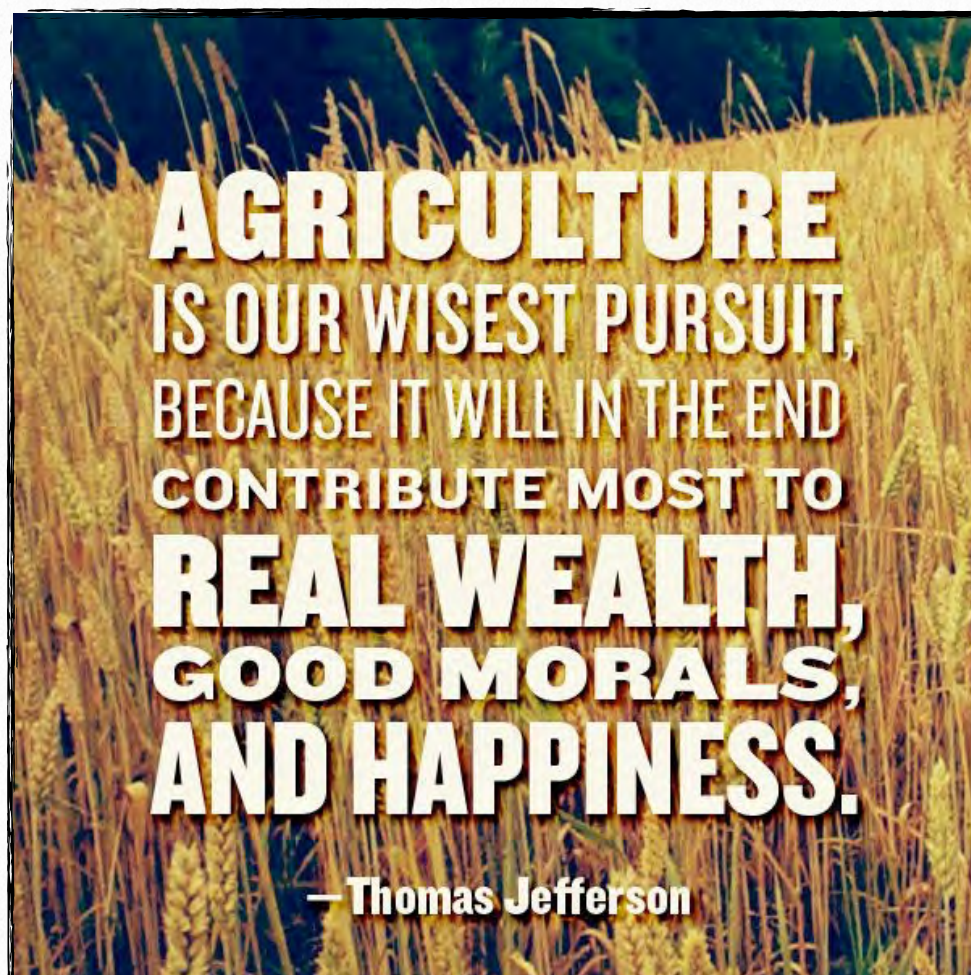
Nominated: David Randall, Seconded: Nicolet Westerhof – Accepted and Congratulations

Public Officer:

Ivan Gant

Nominated: Graeme Harris, Seconded: Di Beale – Accepted and Congratulations

End of BGM – 9.53am



8

Members of NSWAAAT

Financial to end of	First Name	Surname	Location
2017	Susan	ADAM	Northern Beaches Christian School
2019	Bryon	ADAMSON	Corowa 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	Hurststone 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	Justin	CONNORS	Manilla Central School
2017	Ben	COOMBES	Peel High School
2017	Elena	DAGHER	Bossley Park High School
2017	Eric	DATE	Crestwood High School

Financial to end of	First Name	Surname	Location
2017	Sophie	DAVIDSON	Cotton Australia
2018	Erika	DAYAGANON	Hurlstone Agricultural High School
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	Woolgoola High School
2018	Nicole	DWYER	Gunnedah High School
2017	Susan	EARL	Red Bend Catholic College
2017	Anne	EARNEY	Condobolin High School
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
2018	Sian	GRAY	Richmond High School
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 Grammer 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
2017	Tara	JANE	CSU Student
2018	Samantha	JARRETT	Mount View High School
2017	Claire	JOHNSON	CSU Student
2017	Jacquie	JOHNSON	Pre-Service Trainee Teacher
2017	Jarrod	KELLY	Denison College-Kelso High Campus
2017	Paul	KENDAL	Lisarow High School
2017	John	KILLEEN	Bossley Park High School

Financial to end of	First Name	Surname	Location
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	Mossvale 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
2017	Evan	PAUL	Hawkesbury High School
2017	Trish	PEARCE	Trinity Anglican College
2017	Justine	PHILLIPS	Xavier College, Llandilo
2017	Kathleen	PLATTS	Bega High School
2017	Georgina	PRICE	Parkes High School
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	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

Financial to end of	First Name	Surname	Location
2017	Jade	SMITH	Dunedoo Central School
2018	Paul	SMITH	Cowra 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	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 College< Kenthurst
2017	Jane	WALKER	Chatham High School
2017	Dean	WARD	Seven Hills High School
2017	Gary	WEBB	Finley High School
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

165 members @ 28 March 2017
E & O E (please advise the Treasurer)

Life Members

Ian	BAIRD
Tony	BARNETT
Don	BARTHOLOMEW
Lisle	BROWN
Tony	BUTLER
Peter	CRICK
Rod	FRANCIS

Ivan	GANT
Bob	GUEST
Graeme	HARRIS
Phil	HURST
Peter	JONES
Arthur	KELLY
John	LEE

Robyn	O'LEARY
Graham	QUINTAL
Gail	ROBERTS
Norm	ROBINSON
Trevor	SEWELL
Jenni	WILKINS

Associate Membership

Sally	BANNERMAN	SACEC, STEM Leader, Secondary Curriculum - DoE
Dan	RYTMEISTER	TAS Advisor - Secondary Education - DoE
Mark	TYLER	TAS Inspector - BOSTES
NSW	RAS	Sydney Olympic Park
Cameron	ARCHER	Chairperson PIEFA
Ben	STOCKWIN	CEO PIEFA
Kelly	SPENCE	Education Officer PIEFA

Affiliate Membership – (NAAE)

Alysia	KEPERT	Agriculture Curriculum Consultant (WA)
John	LEHMAN	Yolla District High School (TAS)
Hayward	PAYNTER	Waikerie High School, (SA)



Most schools have recently experienced wet conditions. The Ibis are hard at work in James Ruse Agricultural School’s orchard.



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

Pay via Direct Deposit:

Treasurer NSWAAAT
Graham Quintal
16 Finlay Ave
BEECROFT
NSW 2119

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.)

Office Use Only

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.

- ★Graham Quintal
- ★Robbie Ashhurst (James Ruse Agricultural High School)
- ★Alison McGeary (Evans River Community School)
- ★Michelle Fifield (DPI)
- ★Phillip Amour (Yass High School)
- ★Jarrod Kelly (Kelso High School)
- ★Graeme Harris
- ★Justin Connors (Manilla High School)
- ★Carl Chirgwin (Griffith High School)
- ★Max Iqbal (St Johns Park High School)
- ★James Stanton Cooke (Pennant Hills High)

