Sheep Updates 2015 - Moora

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9:00am  Welcome  
West Midlands Group

9:05am  The Sheep Industry Business Innovation project  
Bruce Mullan, DAFWA

9:25am  Western Australian sheep stocktake  
Kimbal Curtis/Kate Pritchett, DAFWA

9:45am  Tedera – a perennial forage legume to reduce your supplementary feeding in summer and autumn  
Daniel Real, DAFWA

10:10am  The National Livestock Identification System (NLIS) for sheep  
Jaq Pearson, DAFWA

10:30am  Morning tea

10:50am  Myths, facts and the role of animal welfare in farming  
Lynne Bradshaw, RSPCA WA

11:20am  Latest research and development in breech flystrike  
Geoff Lindon, Australian Wool Innovation (AWI)

11:50pm  How to boost your lamb survival  
Katherine Davies, DAFWA

12:20pm  Subsidised disease investigation pilot program  
Kevin Hepworth, DAFWA

12:40pm  Lunch

1:10pm  Using genomic technology to increase genetic gain  
Stephen Lee, Sheep CRC & Dawson Bradford, Hillcroft Farms

2:05pm  Economics of feedlotting – to feedlot or not?  
Lucy Anderton, DAFWA

2:35pm  Labour supply and training in the sheep industry  
Jackie Jarvis, Chamber of Commerce and Industry WA

2:55pm  Opportunities and challenges facing youth in the sheep industry  
Ben Patrick, 2014 Peter Westblade Scholar

3:30pm  Closing remarks  
Moora Miling Pasture Improvement Group

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The Sheep Industry Business Innovation project
Bruce Mullan, Sheep Industry Development Director, DAFWA

Presentation outline
The Department of Agriculture and Food, Western Australia (DAFWA) has embarked on a four year, $10 million project to support the Western Australian (WA) sheep industry to capitalise on growing markets for sheep products.

The Sheep Industry Business Innovation project will work with industry to build capacity to supply new markets for sheepmeat and live exports, particularly in Asia and the Middle East.

The overall goal for the WA sheep industry is to be internationally competitive and grow in value in to the future.

The project’s priorities in order to produce a more sustainable, investable and customer-focused sheep industry in WA are:

- To support the establishment of dedicated export supply chains that offer the returns needed to restore confidence in the industry.
- To increase the on-farm productivity of market-preferred products, through better genetic selection and higher stocking and reproductive rates.
- To improve farm business performance and production skills.
- To increase access to investment, both from within and outside of the industry, as a result of increased confidence among investors and more attractive business models.
- To establish the human and physical resources needed to research, develop and demonstrate the elements required to achieve success in the industry and the means of sustaining those resources into the future.

This $10 million Sheep Industry Business Innovation project is made possible by the state government’s Royalties for Regions program, where mining proceeds are invested into regional WA priorities including agriculture.

Meat and Livestock Australia (MLA) has co-invested in the project, which is also supported with funding from the Sheep Cooperative Research Centre (CRC). The WA Sheep Industry Leadership Council is part of a stakeholder reference group that will provide direction to the project.

Information about the presenter
Bruce Mullan was raised on a wheat-sheep-pork family farm in Western Australia. He graduated with a BSc (Agriculture) from the University of WA (UWA) in 1978 and spent the next four years as a regional adviser with DAFWA, which was then known as the Department of Agriculture.

He then undertook a PhD in pig nutrition, also at UWA, before spending more than two years doing research in the United Kingdom and a further three years with the Victorian Institute of Animal Science.

He re-joined DAFWA in 1992 and became manager of the pig research group. During this time he travelled extensively through Asia and Europe providing nutrition support to the animal feed industry. In 2010 he was appointed Director of Livestock Innovation, and in 2014 appointed
Director of Sheep Industry Development with responsibility as Project Manager for the Sheep Industry Business Innovation project funded by Royalties for Regions.

Notes
Western Australian sheep stocktake

Kate Pritchett and Kimbal Curtis, Research Officers, DAFWA

Presentation outline

The key market indicators for the sheep industry are all at the higher end of the range recorded during the last 10 years. While good for producers, high prices make doing business difficult for processors and exporters. With around 80% of Western Australian sheep meat exported, the softer Australian dollar provides some support.

In mid-2014, there were 14.4 million sheep and lambs in WA including 8.0 million breeding ewes. With a projected turn-off of 5.4 million head in 2014/15, and a normal level of on-farm losses, a marking rate in the mid-90’s would be required to maintain the sheep population. A more likely scenario is a marking rate in the high 80’s and a closing number for mid-2015 of just on or below 14 million.

While high sheep prices and therefore increased profitability provide some incentive to grow the flock, or get back into sheep, they also make it more expensive; either through the direct cost of buying ewe hoggets or by way of the cash flow foregone by retaining extra ewe lambs. However, expected growth in demand suggests this investment is worth considering.

Sheepmeat exports of over $320 million in both 2013/14 and 2014/15 make these the two largest grossing years of the last decade. The volume shipped in these two years is significantly higher than was shipped between 2009/10 and 2012/13, and equivalent to that shipped in 2008/09 and earlier when the flock was over 18 million and declining by around two million head per year.

Despite the jump in sheepmeat exports during 2013/14 and 2014/15, export prices also rose suggesting that demand was growing faster than the growth in supply. Contributing to this imbalance has been the impact of China where growth in sheepmeat consumption is diverging from growth in production, with the difference being picked up by imports. Western Australian sheepmeat exports to China have grown from 5000 tonnes in 2010/11 to 13 900 tonnes in 2013/14 and 12 900 tonnes in the first 11 months of 2014/15. China is now Western Australia’s largest single market with a share of just over 20%.

Information about the presenter

Kimbal joined DAFWA as a research officer when the WA flock was 30 million, and before it peaked at 38 million. He blends his science degree, computing skills and access to industry statistics to analyse and report on the sheep and cattle industries in WA. Kimbal lives in Fremantle, port of loading for the live sheep trade.

Kate completed a Bachelor of Science in Agriculture through Charles Sturt University as a distance education student while living and working in the Kimberley. She joined DAFWA in 2014 (flock 15 million) with several years’ experience on a number of iconic Kimberley cattle stations. She undertakes livestock industry analysis and reporting, providing data and interpretation to support decision making in DAFWA, including for the Sheep Industry Business Innovation project. Working from the Katanning office, Kate is experiencing her first Upper Great Southern winter.
Tedera – a perennial forage legume to reduce your supplementary feeding in summer and autumn

Dr. Daniel Real, Senior Plant Breeder, DAFWA

Presentation outline

After six years of evaluation of hundreds of potential perennial legume species in Western Australia, in areas with annual rainfall from 200 mm to 600 mm, tedera was found to be one of the most drought tolerant and productive herbaceous forage legumes and has the ability to remain green with minimal leaf shedding during summer and autumn.

Tedera is native to Lanzarote island, Canary Islands, Spain. The first reference to tedera as a forage of interest for the Canary Islands was recorded in 1867. The authors wrote that wild and cultivated tedera were successful and were harvested twice per year and grew moderately well in areas without irrigation and with medium fertility soils. Another record came in 1915 from the Head Gardener at the Botanic Garden of La Orotava (Tenerife island) who wrote about the potential to cultivate tedera in good quality lands, like a rain-fed lucerne crop, implying there was no need to irrigate tedera. A more recent technical report in 1983 on livestock development possibilities for the Canary Islands noted that “tedera plays an important role in traditional livestock production as an excellent fodder for ruminants, usually in the form of hay, but also grazed directly or mixed with cereal straw or other herbs”. Nonetheless, the scientific community only began research work on this species in the last 25 years. More recently, since 2005, a coordinated scientific network involving countries with Mediterranean-type climates commenced a multi-disciplinary, highly focused and coordinated program of research and breeding of tedera.

Tedera grows all year round, but reliable production of green feed during summer and autumn is very valuable to farming systems because it reduces the need for high cost supplementary feeding (grain, pellets, hay) and associated labour to offset the poor quality of dry annual plant residues. Tedera also tolerates grazing as a pure stand or as part of a mixed sward and performs well under continuous or rotational grazing. A summer and autumn grazing trial at Bidgerabbie farm at Dandaragan in 2014/15 demonstrated that tedera can sustain 10 DSE/ha without supplementary feeding (and without irrigation), while maintaining condition score and animals (wethers) gained 5 kg/hd during the 4.5 month grazing period.

There has been no report in the literature or in our Australian trials of any ill-effect from consuming tedera in its green form as a major part of the diet or as a sole diet. Tedera is now regarded as a promising new herbaceous perennial forage legume for providing out-of-season forage production across all rainfall zones in southern Australia. Seed production of a future commercial line started in 2014.

Information about the presenter

Dr Daniel Real is a Senior Plant Breeder with the Department of Agriculture and Food, Western Australia (DAFWA) with 24 years of experience in breeding both annual and perennial forages for temperate, subtropical and Mediterranean climates. He is originally from Uruguay, graduated from the University of Uruguay in 1991 and did his PhD in Plant breeding from 1994 to 1997 at Massey University, New Zealand. He has released eight cultivars of five forage legume species and has published 45 peer-reviewed journal articles. He moved to Australia in 2003 to lead a forage breeding program to develop cultivars of lotus better adapted to Australian environments. He is now leading an international program to domesticate the drought-tolerant perennial legume, tedera. Dr Real has considerable expertise on plant breeding methodology, biometrical analysis, use of molecular markers for pasture breeding and selection as well as agronomy and grazing systems.
National Livestock Identification System (NLIS) for sheep and goats – what is the NLIS database?

Jaq Pearson, Technical Officer, DAFWA

Presentation outline

In Western Australia, approximately 15,000 sheep are moved every day. To keep track of these as well as similar movements in the other states, a national database is used to record the details of every movement.

The NLIS allows stock to be traced from their property of birth through all subsequent properties or to the place of slaughter. The system provides:

- better traceability for disease outbreaks
- better traceability for food safety (residue detection)
- better biosecurity outcomes.

What information is recorded?

For sheep and goats, the NLIS database records mob based movements where animals move from one property identification code (PIC) to another. Information to be recorded must include:

- date of movement
- waybill number
- brand
- number of animals in mob (a single animal is also a mob)
- if the stock are vendor bred.

Who is responsible?

It is the responsibility of the receiver or purchaser of the stock to update the database, except if purchased from a saleyard (then it is the responsibility of the saleyard).

Producers need to record the following movements on the NLIS database:

- sheep purchased privately
- sheep moved between your different PIC’s
- sheep moved to and from agistment properties.

The record of movement must be completed with 48 hours.

Creating an NLIS database account

An NLIS account can be created free of charge at www.nlis.mla.com.au

For assistance contact the DAFWA sheep NLIS helpdesk on +61 (0)8 9363 4150 or sheep.nlis@agric.wa.gov.au

Information about the presenter

Jacquie is an experienced Biosecurity Officer with the Department of Agriculture and Food, Western Australia, and has a background in farming. As part of her role, Jacquie assists WA sheep producers to ensure they meet National Livestock Identification System (NLIS) electronic traceability requirements via the NLIS Sheep HelpDesk.
Jacquie’s other roles within DAFWA include training operational staff under the Livestock Biosecurity Emergency Animal Disease Preparedness program. Jacquie is also a former member of the National Rapid Response Team for animal disease emergencies.
Myths, Facts and the role of animal welfare in farming

Lynne Bradshaw, President, RSPCA WA

Presentation outline

The Royal Society for the Prevention of Cruelty to Animals Western Australia (RSPCA WA) was established in 1892 in response to public concern about poor treatment of working animals such as horses. RSPCA WA is the state’s oldest, largest and leading animal welfare charity. RSPCA WA’s objectives today reflect its early objectives and apply to domestic, wild and farm animals.

So, what is the difference between animal welfare, animal activism or animal rights?

RSPCA WA supports farming of animals for food or fibre and seeks to work with producers to achieve the best possible humane and practical animal welfare outcomes. Animal activist or rights groups do not support the farming of animals for food and fibre. RSPCA has an approved farming scheme which helps producers tap into the Australian consumers’ desire to know where their food comes from and to pay higher prices for food produced to high welfare standards. The approved farming scheme involves many producers of chicken and turkey meat, eggs and pork. We continue to work with the Sheepmeat Council of Australia providing them with community feedback and welfare advice.

RSPCA WA is a barometer of the community’s expectations about animals used for food and fibre. We will explain why the general public trust RSPCA, how we work with DAFWA and other government agencies and farming groups and also discuss the RSPCA position and policy on performing husbandry procedures on sheep. We will be able to dispel some of the myths and provide some facts about why we are not the same as animal rights groups.

We will have several members of the RSPCA team available on the day to take questions.

Information about the presenter

Lynne Bradshaw was elected President of the RSPCA WA in 2004 after joining the RSPCA WA Council in 1997. She was also the National President of RSPCA Australia from 2006 to 2013.

Lynne has had a 30 year career in business development in the healthcare industry, with experience in senior management and director positions in both public and private entities, locally and internationally. Her focus has been in building businesses, either from inception and start-up, or by taking SMEs through acquisition and merger to eventual sale or public listing. Lynne has a particular interest in supporting locally developed medical technologies through commercialisation as part of the growth strategy for these businesses.

Lynne has strong skills across business development, strategic marketing, financial and business management, as well as product management, commercialisation and market development.

Before moving to Australia in 1985, Lynne was a committed member of RSPCA UK. She has also been an active member in the Fauna Rehabilitation Foundation (now Native Animal Rescue) and is a sitting member of the Telethon Institute Animal Ethics Committee, the Ausbiotech WA Committee and is the RSPCA WA representative on the WA Animal Welfare Advisory Committee.
Latest research and development on breech strike prevention

Geoff Lindon, Manager Productivity and Animal Welfare, AWI

Presentation outline

The focus of AWI’s Breech Strike Prevention Program is to provide woolgrowers with a range of options now and in the future, to choose the best method of breech strike prevention for their climate, country and sheep type. The Program consists of;

- Breeding for breech strike resistance
  Lower breech wrinkle, dags, urine stain, breech cover
  Genomics, odour and bacteria

- Breech modification
  Clips
  SkinTraction
  Liquid Nitrogen and laser

- Pain relief products
  Tri-Solfen
  Buccal Meloxicam,
  Broadening use approvals

- Chemical prevention
  Monitoring resistance
  Fly genome
  Future control options

- Rebalance of existing husbandry options
  Time and length of joining
  Time of crutching and shearing
  Chemical use, sheep type

- Assessing lifetime animal welfare
  Comparison of control options

- Wool declarations and market analysis

- Woolgrower communication and training
  ParaBoss, National Mulesing Accreditation Program, MERINOSELECT

- Supply chain transparency
  Program audits, retailer advice
  Supply chain standards & liaison with animal welfare groups

Information about the presenter

Following studies at (?) Roseworthy Agricultural College and the University of New England, Geoff worked on Bungaree, Egelabra, and Bononke/Wanganella Merino studs. He then managed the Trangie Agricultural Research Centre, was Livestock Operations Manager for the Twynam Agricultural Group from 1996-2007 and then joined AWI.
How to boost your lamb survival

Katherine Davies, Development Officer, DAFWA Northam

Presentation outline

There are a few main points when investigating how you can boost your lamb survival. Many of these come from findings out of the Lifetimewool project and have since been integrated into Lifetime Ewe Management courses.

Firstly, think about lamb survival and the factors that drive it.

- **Ewe nutrition**
  - Ewes lacking energy to birth the lamb increase the likelihood of traumatic lamb birth and possible ewe mortality.
  - Hungry ewes produce inadequate milk supply and increase likelihood of lamb abandonment or mismothering.

- **Lamb birth weight**
  - Is affected by ewe nutrition during pregnancy.
  - Light lambs risk increased threat of malnutrition, exposure and predation.
  - Heavy lambs risk dystocia and traumatic birth.

Given these factors (and many others) affecting lamb survival, there are a number of strategies that can be put in place to counteract.

- **Condition scoring ewes**
  - Allows management of ewe nutrition throughout the reproductive cycle, ensuring that ewes are in optimal condition to produce viable lambs.

- **Pregnancy scanning for multiples**
  - Allows you to manage ewes according to litter size, allocating nutrition to the twin bearing ewes that need it, while rationing feed to dry and single bearing ewes to reduce the risk of dystocia.

- **Feed budgeting**
  - Calculated using condition scores of the flock and Feed on Offer (FOO) in the paddock: are they getting enough? It takes the guess work out of feeding.

- **Lambing paddock preparation**
  - A sheltered paddock reduces the risk of exposure and smaller mob sizes decrease the risk of mismothering.

Information about the presenter

Joe graduated from Lincoln College in New Zealand in the early 80's and farmed a mixed farming operation in Esperance before returning to the family farm at Kojonup.

Initially Joe ran the Jingalup Ram Breeding Co-operative for the AMS before branching into a sheep trading operation in early 90's.

He has facilitated local Lifetime Ewe Management groups, helped design and present The Sheep's Back course and is currently facilitating the Southern Dirt Lamb Survival Initiative.
Subsidised disease investigation pilot program

Kevin Hepworth, Program Coordinator, DAFWA

Presentation outline

DAFWA recently launched a pilot program to boost surveillance and testing for emergency animal diseases in WA.

The subsidised disease investigation pilot program helps producers to investigate signs of disease in their stock by subsidising the cost of a full veterinary investigation. By encouraging more producers to investigate disease and obtain a correct diagnosis early, the program aims to boost WA’s capacity to detect exotic animal diseases early.

The pilot program will run until September 2017 and is able to subsidise disease investigations in cattle, sheep, pigs or goats, although there is an annual limit of cases.

The program can be accessed through either a private or a DAFWA veterinarian. Participating producers receive a $300 subsidy towards a disease investigation from the producer’s chosen vet and up to $800 worth of laboratory testing from the DAFWA Animal Health Laboratory.

The pilot program is part of the Boosting Biosecurity Defences project, and is made possible by Royalties for Regions.

Joint benefits of the pilot program

Early detection – more investigations into signs of disease in stock will increase WA’s capacity to detect an outbreak of an exotic animal disease early. The earlier an exotic disease outbreak is detected, the more likely it can be eradicated or controlled, limiting the impact on farmers and rural communities.

Market access – to ensure ongoing access to key overseas markets for livestock and livestock products, WA needs to continue to provide evidence that we do not have certain diseases. More disease investigations provide an opportunity to do more testing for emergency animal diseases and to use the negative test results as evidence for freedom.

Benefits for producers and the WA livestock industry – livestock producers can engage a veterinarian to conduct a thorough disease investigation at reduced cost, enabling them to put control measures in place and improve profitability and productivity. It is expected the stronger relationships between producers and their vet will help boost disease surveillance longer term.

Information about the presenter

Kevin was raised on a family wheat and sheep farm in the northern wheatbelt. After graduation from university he worked in private veterinary practice in Narrogin before trying farming briefly at Perenjori in the early 1980s. He spent the next 30 years as a private veterinarian with practices in Dongara, Three Springs and Jurien Bay. Kevin joined DAFWA in late 2012 in Geraldton as district veterinary officer with responsibility for disease surveillance in the northern agriculture area as well as sampling in the Pilbara for the national arbovirus monitoring program. He recently moved to the Bunbury office where he is the field coordinator for the subsidised disease investigation pilot program.
Using genomic technology to increase genetic gain

Stephen Lee, School of Animal and Veterinary Sciences, University of Adelaide and Sheep Cooperative Research Centre (CRC)

Presentation outline

DNA technology has developed rapidly over recent decades and we can now generate information relatively cheaply from the DNA of individuals. The Sheep CRC has developed a number of DNA tests useful for sheep enterprises. These are the Low Density (LD) genomic test, parentage test and poll test. A DNA test requires the collection of a small blood sample on a blood card. This can be done, for example, by making a small cut on the ear. Blood cards are provided when ordering tests; they are specially designed for collecting blood for the purpose of DNA testing. The cards are barcoded and the identification number of the animal that the sample belongs to must be provided on the card.

Sheep CRC LD test

The LD test provides information about an animal’s breeding value for four breeds of sheep Merino, White Suffolk, Poll Dorset and Border Leicester. Information from the test is combined with pedigree and performance data in the Sheep Genetics database to increase the accuracy of Australian Sheep Breeding Values (ASBVs). The LD test increases accuracy of breeding values, especially for young animals and for traits that are generally measured later in life or not measured at all. This is important as genetic gain in sheep breeding programs is made by identifying and selecting the best animals. Greater genetic gain is achieved when animals can be more accurately selected and mated at younger ages.

The LD test is expected to increase rate of genetic gain for Merino breeders that use the test by between 10-15%. Importantly, it is expected that testing about the top 20% of the ram drop will give more than 90% of the potential genetic gain. Terminal ram breeders are also expected to benefit from use of the LD test as it provides ability to identify and select rams that are superior for lean meat yield (LMY) and eating quality traits. To date, terminal ram breeders have successfully used current selection indexes and measurements for growth, muscle and fat depth to achieve substantial genetic gain. The LD test will allow breeders to incorporate selection for eating quality, for which there was previously limited information.

Sheep CRC LD 12K test key points

- Genomic tests increase ASBV accuracy and, therefore, rate of genetic gain.
- The increase in ASBV accuracy is highest when there are limited measurements available, for example in young animals.
- The most cost effective use is to test mainly rams.
- Testing about 20% of the ram drop to achieves most of the extra genetic gain.
- Commercial sheep producers can benefit by purchasing rams with superior genetic merit based on Sheep Genetics ASBVs.

Information about the presenter

Stephen is based at the School of Animal and Veterinary Sciences at the University of Adelaide where he has a multifaceted role focused on applying technology in the livestock industries. Stephen works with the Sheep CRC and sheep breeders on effective implementation of genomics into sheep breeding programs. This includes developing strategies to optimise investment in genomics for genetic gain.
Further information:
Detailed information on the DNA tests developed by the Sheep CRC and order forms for the tests can be found at [http://www.sheepcrc.org.au/genetic.php](http://www.sheepcrc.org.au/genetic.php)

Notes
A case study of sheep breeding using the latest genetic and genomic technology

Dawson Bradford

Presentation outline

Stud breeding is not about producing one good animal but about producing a whole flock of high performing animals that can maximise commercial return to its owner.

This case study compounds over 20 years of using the highest performing animals that are structurally sound and functional, manipulating their matings to produce offspring that improve the overall performance of flocks.

Many points of resistance are met along the way with antagonistic occurrences between different traits proving difficult but not impossible to overcome.

All of this would not be possible without the use of genetic technology. In recent years the use of genomics has opened up new fields of opportunity.

Producing sheep custom bred to meet almost any specifications in breeding performance and/or eating quality is now a reality.

Information about the presenter

Dawson along with his wife Greta as well as son Dawson and his wife Lisa, own and run a 12 500 acre mixed farming enterprise near Narrogin. He has been breeding Poll Dorset Sheep for terminal sire production for over 50 years.

In recent years has also turned to developing a new composite breed known as UltraWhite, a hardy, easy-care composite that doesn’t need shearing or crutching, doesn’t get fly struck or affected by lice. It is very fertile and produces a high quality carcase, has superior growth rates to other wool shedding breeds available in Australia today and is suited to a wide range of climatic environments.

Dawson is also Chairman of the Western Australian Meat Marketing Co-operative Limited (WAMMCO); a position he has held for nearly 15 years.

Notes
Economics of feed lotting – to feed-lot or not?

Lucy Anderton, Economist, DAFWA

Presentation outline

Farming systems have responded to market signals and adapted to a dual sheep enterprise producing wool and meat either as prime lambs and or live sheep for slaughter overseas. However, finishing lambs for the prime lamb market in Western Australia’s Mediterranean climate and short growing season can be difficult and costly.

Decisions about time of lambing and stocking rates to achieve growth rates influence how many lambs meet market specifications by when, and understanding the end margin using market information and key profit drivers for finishing lambs may improve the final profit result.

Deciding how to finish lambs requires an understanding of these profit drivers, which are:

- Weight animal enters the feed-lot
- Growth rate
- Cost of ration

Other factors which influence the final result are the price of store sheep and sale price of the finished animal.

Information about the presenter

Lucy has worked for DAFWA since 2002 and specialises in farming systems and bio-economic modelling for live-stock systems. Her interest in understanding the drivers of whole farm performance, the interactions between enterprises and socio-economic systems stems from her history working and living on farms in W.A, which she continues to explore in her research.
Sheep industry traineeships – encouraging a new generation of farmers

Jackie Jarvis – Consultant, Agrifood Labour & Skills

Presentation outline

A sheep industry traineeship program was initiated at the request of the Sheep Industry Leadership Council (SILC) in partnership with DAFWA, together with the Chamber of Commerce and Industry (CCI) and the Food, Fibre, Timber Industry Training Council (FFTITC).

A nationally recognised Certificate in Agriculture is available to school leavers, or any other employee who wishes to ‘formalise’ the on-farm training process.

This is known as a ‘traineeship’ and works like an apprenticeship, where someone is employed on a part-time or full-time basis, with training occurring on-the-job, under the guidance of the farm owner or other senior staff member. The process is by supervised by regular visits from the local Training Institute (formally known as TAFE) that ensure that the trainee can complete 16 units of ‘competency’ chosen from a compressive list. Most training occurs on the farm, but the training institute can arrange for lessons online or in a classroom environment if needed for some of the units.

Some of the unit of competency could include:

<table>
<thead>
<tr>
<th>Administer medication to livestock</th>
<th>Maintain livestock water supplies</th>
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<tr>
<td>Identify and draft livestock</td>
<td>Implement animal health control programs</td>
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<tr>
<td>Implement feeding plans for livestock</td>
<td>Prepare animals for parturition</td>
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<tr>
<td>Rear newborn and young livestock</td>
<td>Plan and construct conventional fencing</td>
</tr>
<tr>
<td>Keep records for a business</td>
<td>Monitor livestock production</td>
</tr>
<tr>
<td>Operate machinery and equipment</td>
<td>Fabricate &amp; repair metal or plastic structures</td>
</tr>
<tr>
<td>Prepare and apply chemicals</td>
<td>Prepare facilities for shearing and crutching</td>
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The indicative award rate of pay for a school leaver, employed under the Pastoral Award, and enrolled in an approved traineeship is $9.92 per hour. You can choose to pay more than the award rate, and remember you will need to confirm the correct award rate prior to employing someone. Your business may be eligible for up to $5000 in government incentives for employing a trainee.

This program will provide some guidance to assist with recruitment and you are asked to register your details if you would like further information.

Information about the presenter

Jackie Jarvis was raised in the northern Perth suburb of Wanneroo and spent her adolescence working on vegetable farms, before commencing a career in the banking sector. A work transfer saw her relocate to the South West over 25 years ago, where she and her husband Matt are commercial grape growers.

Jackie has an off-farm career specialising in agricultural labour supply issues, both domestic and international, and has managed a number of programs including the Harvest Trail; the seasonal worker program and a regional migrant employment support pilot. In 2014 Jackie was
named WA Rural Woman of the Year and was national runner-up, in recognition of a program placing resettled refugees into agricultural jobs. Jackie is now employed by CCI providing expert advice on labour and skills to the agrifood industry, in partnership with DAFWA.

Notes
Opportunities and challenges facing youth in the sheep and wool industry

Ben Patrick, Yarrawonga Merino Stud

Presentation outline

It is becoming more and more evident that the sheep and wool industry is not attracting the younger generation that it should. The opportunities and challenges that the youth face within the industry are directly related.

Throughout the presentation, he will cover what he see are the challenges and opportunities that he faces now and may face in the future, whilst relating his experience to Australian Sheep Breeding Values and commercial breeding programs.

Challenges and opportunities covered:

- succession
- corporate investment
- profitability
- labour costs
- new technologies.

With the continued pressures of profitability and the exciting opportunities that research and development within the industry provides us with, we must not forget where the industry has come from.

Ben will also talk about the Peter Westblade Scholarship, a program that was established to provide a hands-on approach to new technologies and provide networking opportunities to the youth of today whilst also providing young people with the ability to form a career path within the industry. He will describe what the scholarship contains, its values and how to apply, whilst relating back to his story.

Information about the presenter

Ben was brought up on a family farm on the southern tablelands of New South Wales. He studied agriculture business management via distance education (at CSU) whilst working full time on a number of corporate and family owned properties, then went on to manage a large commercial Merino operation and for the last two and a half years has been the livestock manager and stud master for Yarrawonga Merino Stud.

Following the MerinoLink conference and the Peter Westblade Memorial Wether Trial, Ben was awarded the 2014 Peter Westblade Scholarship.

Notes
The Department of Agriculture and Food, Western Australia would like to acknowledge and thank their partners in the Moora Sheep Updates 2015; Making More From Sheep, West Midland Group & Moora Miling Pasture Improvement Group.