

ASHEEP News



ASHEEP Shearing School

August 2019

Newsletter #53

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AGM Conference Review

Save The Date:

Thursday
12th September
Cattle Field Day

Thursday
26th September
Spring Field Day



Basil Parker

ASHEEP Committee member, Basil Parker and Bob Reed have been working on establishing a Shearing School in Esperance for the last three years.

Through their great persistence and funding from Australian Wool Innovation (AWI) the first shearing school came to fruition running for two weeks, starting on the 1st July this year.

Basil Parker has always been passionate about getting more young people into the industry. Basil wasn't happy to just run a school, he set a goal of seeing young people employed into the industry. At the time of writing this article five of the course participants had secured employment, a great result, well done Basil.

Basil and the ASHEEP Committee would like to take the opportunity to thank the people that helped make this shearing school possible.



Firstly, AWI who funded the whole course which included the trainers and their accommodation, bus hire, meals and drinks each day and combs and cutters for the fortnight.

The trainers, Amanda Davis Wool Handling Trainer, Todd Wegner Shearer Trainers, who showed amazing patience working with students who had never held a hand piece or had anything to do with sheep before they started the course.

EPASCO Farms for providing the shed and the all-important sheep and a big thanks to new manage Nick Ruddenklau and his staff Jay Daw and Jake Hann.

Steven Allison, Bay of Isles Shearing, who was a great all-round help from hiring us two of his vans to sourcing back aids and anything else that was required. Luke O'Shannessy New Era Shearing provided the Evo over head gear.

Tamara Virgo TV Financials spoke to the student twice on basic financial planning and has donated a one-hour consultation to each of the participants.

Finally, Ian Mickel, Andy Beaton and Stuart Matthews for talking to the student about their time in the industry and their achievements because of shearing.

Of the 14 students that attended two are now working with Noel Smith and four with Steve Allison. Basil remains in touch with all the participants and provides support where required.

We encourage farmers to provide a learner stand when you shear next so these young shearers can keep improving their skills and work their way into a permanent position.

Photos courtesy of Emma Iddison



Case Study: ASHEEP's New President, Mark Walter

Walter Ag



Wayne & Christine, Mark & Liv with daughters, Tara (14), Heidi (11) Emily (9) and Grace (6), Todd & Kim with their children Harry (6) and Zoe (5) Walter are currently involved with the family farming business at Cascade, 110kms North West of Esperance.

They also employ 2 permanent employees, Joe and Mat. They run a mixed cropping farm which this year consists of 1500ha pasture and 6000ha of cereal grains. Mixed meaning everyone has to do a bit of everything at times.

At the beginning of the year they mated 4200 Merino ewes, 1000 to white Suffolk rams, the rest to Merino rams. All of the pastures were seeded in early March to either RM4 Vetch mixed with Canola or RM4 Vetch mixed with Rasina or RM4 Vetch on its own. In the past this strategy has worked well with good grazing available from April onwards. This year however it has only really got going after the recent rains.

It has been a challenging year for those with livestock. A lack of runoff into dams has meant dam scooping kept them busy all autumn along with cleaning catchments. At the start of the year they had silage, hay and straw as well as lupins on hand, usually not used until May in the event of a late break. This season however the silage was all gone by May as well as half the hay and they had purchased more Lupins and Barley from CBH.

With the lack of water and paddock cover they decided to offload some stock early and lock all remaining stock up in confinement. They sold the two oldest age groups that had lambed in March as well as 800 preg tested ewes. The X-bred lambs were sold off their mums at weaning. This left them with 2000 ewes to lamb in July plus 1000 ewe hoggets.

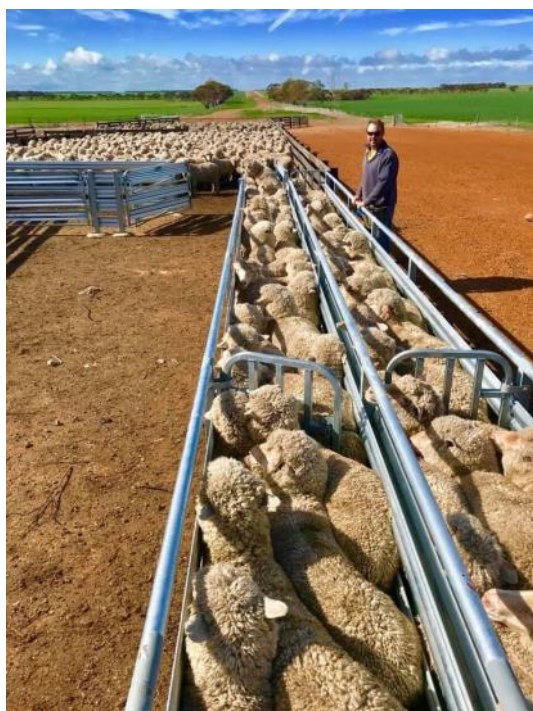
They have in the centre of one property a 250ha patch of pine trees close to good water. They fenced it into three sections and put water troughs in it. The ewes were split up into a mob off 800 maidens in 50ha, 500 mixed age in 50ha, and 400 mixed age in 100ha they went in 4 weeks before lambing started on June 15. They were fed ad lib

straw and hay although the hay was not topped up in the paddocks until they had also eaten the straw. They trail fed a 50/50 mix of barley and lupins three times a week at about 0,9kg per head per day. They used a basic calcium/sulphur mineral mix fed out in tubs at about two 20kg bags per 100 ewes per week. Before going in the ewes had there vaccine booster and drench.

The ewes were let out around the 25th July, so they were in the trees for 8 weeks. Towards the end we started to lose some of the bigger and older lambs. Once they were put into green feed this stopped which seems similar to problems we have in the feedlot after they have been on grain for a long time, you get away with it for 6 weeks and then begin to have problems. All three mobs did 85% lambing on the mulesing cradle. All the ewes were preg-tested singles.

Mark thinks it may have been beneficial to split the trees up more and have smaller mobs, maybe around 300. There is a fair bit going on when you go in with the feed cart and the ewes are not too concerned about the lambs. The environment was good for lambing with shelter from the wind and it always felt 3 to 5 degrees warmer in there. It would also be good to have a shorter lambing time so you can get them out a bit earlier if pasture is available.

The delayed grazing has left the paddocks in good shape for spring. With 127 mm for the year, 60 of that in August, it never ceases to amaze Mark just what they can grow cropping and pasture wise in this day and age with very little moisture. Hopefully recent rains continue and they can all finish the year strongly and looking forward to next year.



New Committee Member

The ASHEEP Committee welcomed our first female committee member at this years AGM Conference.

Karina West grew up on the family farm in Kojonup. Went away to Perth to finish high school and from there went to UWA to study Agricultural Science.

Once she completed her degree she moved to Esperance early in 2005 to start a job with Landmark as an Agronomist. It was during this time working in Esperance that she met Leigh and they married in 2009. She worked for Landmark for 5 ½ years doing Agronomy before they welcomed there sons arrival.

Since then Karina has enjoyed working on their farm at Gibson whenever she can, while raising 3 young boys.

It is a very exciting time for both sheep and wool and Karina is looking forward to contributing to enhance our exciting industry through her involvement on the ASHEEP Committee.



MerinoLink Introduction to Flock Profile and ASBV's Workshop

ASHEEP is running a five-year project with MerinoLink and the University of New England (UNE) call the DNS Stimulation Project. This project is 50% funded through an MLA Donor company agreement.

The purpose of the project is to work with a seed stock and commercial breeders to increase their use of the genetic and genomic tools currently available with the aim to double genetic gain in line with the MLA's National Livestock Genetic Consortium's strategic direction by 2022.

We have 4 studs and 20 commercial breeders in the group. In 2018 they all had Flock Profiles done via a random draft of the 2017 drop ewe lambs to select twenty ewes for testing. Tissue samples were taken, and this has formed the basis for the Flock Profile.

The Flock Profile used genomic markers from the Nucleus Flock to predict the performance of various traits.

A Flock Profile is only a tool. It is to give you an idea of where your flock may sit. It needs to be noted that your flock profile will continue to change as more information comes in from the nucleus flock and unlike ASBV's the flock profile doesn't provide an accuracy indicator.

The next tool is the use of the RamSelect website. The idea is, if you have purchased rams from a stud that uses ASBV, to enter each ram's management numbers from your current ram team into the website. RamSelect has a current record of each rams ASBV's and can show you the genetic merit of your ram team.

With an understanding of your flock profile and your current ram team information you can then set targets or breeding objectives. As we come into Ram buying season it is hoped you can make more informed decisions on your ram purchases to realize you breeding objective.

While the project group is closed, producers are still able to Flock Profile their flock and purchase a subscription for the RamSelect website.

While Sally Martin, MerinoLink CEO and Tom Granleese, Research Fellow, Animal Breeding & Genetics at UNE were in Esperance for the group's annual workshop we ran an Introduction to Flock Profile and ASBV's workshop which was open to anyone interested. Some of whom are in the process of getting flock profiles completed.

If you would like more information on Flock Profiles and the RamSelect website please contact Jan Clawson on 0407 990 497 or email janclawson@bigpond.com.



Vet Spot: Trace Mineral Supplementation

Too much of a good thing?

Many producers know the benefits of trace mineral supplementation in sheep and cattle. Ensuring an appropriate trace mineral status can improve fertility, immunity and growth rates. Various products can be used to improve the levels of these minerals in livestock. The trace minerals in these products vary from product to product, but commonly include copper, cobalt, selenium, zinc, manganese and/or molybdenum. Administration of these products may be through oral drenches, dry licks, wet licks, injections, pour-ons, or applied to supplementary feed or supplemented via paddock fertilization. Frequently these trace minerals are given to individual animals at times key times or preceding periods of stress such as prior to breeding, prior to parturition or at marking/weaning.

While appropriate trace mineral supplementation can optimize production, overdosing or inappropriate supplementation can cause these minerals to reach toxic levels. Consider as well that your animals base level of micro-minerals may vary between properties or even paddocks and that base levels may vary from year to year even though animals seem to have been reared identically. For instance, dry conditions can concentrate some micro-minerals in the remaining feedstuffs therefore pica, or the consumption of soil, can further influence natural micro-mineral intake. In some instances, plant tissue levels may be sufficient, but antagonism with other minerals in the plant may interfere with absorption in your cow or sheep. If you are uncertain of your animals and properties base line micromineral status, please engage your agronomist

to ensure your plants are receiving optimal supplementation and/or call us at Swans Veterinary Service to collect samples from your own young animals pre supplementation.

This year Swans Veterinary Services has encountered multiple cases of trace mineral toxicity in supplemented young stock. Before administering multiple products producers should carefully check the doses of trace minerals such as selenium in each product to ensure they are not at risk of overdosing. When giving trace minerals be sure to check the following:

- Total amount of a trace mineral administered if using multiple products.
- Accurate dose rate for the weight and life stage of the animal. For example ensure calves are not receiving mature cattle dosages or small calves are not administered heavier calf doses.
- Ensure administration tools such as a vaccination or drenching gun are set to the right dose and functioning properly. Continue to check this as you are using it as dials and plungers can move or break with prolonged use.
- Correct administration – ensure those handling the products are aware of proper administration techniques. Check if the product is labeled to be given subcutaneously or intramuscularly for example.
- As mineral toxicity can be a serious problem, if you are unsure if an animal has received the full dose (due to movement or administration technique) it is best NOT to deliver a second dose.

Trace mineral overdose, such as selenium toxicity, can result in sudden death, especially in young stock. These deaths become obvious 24-72 hours post administration and can occur suddenly in large numbers. There is no antidote for selenium toxicity. Checking and double checking your dosages prior to administration is of the utmost importance. If you suspect your herd has suffered a trace mineral overdose or are experiencing unexplained mortalities post treatment, contact your veterinarian as soon as possible. A veterinary visit to investigate sudden deaths usually involves a thorough discussion of the potential issues and a review of relevant management practices, assessment and blood sampling of live animals and collection of post mortem samples from recently deceased stock.

Too much of a good thing can lead to very poor outcomes.



Market Report: Wool



WESTCOAST

WOOL & LIVESTOCK

WOOL MARKET REPORT

Week ending 9 August 2019

THE wool market has opened after the recess in the 2019-20 selling season on a disappointing note, with falls on average of 180c/kg clean across all full-grown Merino fleece wool categories. Taking this to the farm gate on 21-micron Merino fleece wool and using a yield of 66% and average WA bale weights, it equates to a fall of around \$220 per bale. This represents the 74% percentile in the last five years, meaning 21 micron has traded above today's level for 26% of the time and below for 74%, leaving a bale at \$2270 based on the above.



LOOKING AT THE FUNDAMENTALS

The Australian dollar and a low supply were in the market's favour. The low supply will remain in the market's favour in coming months, as well as the lack of greasy wool in the pipeline waiting to be processed. These factors have not been enough to hold the market. A fall of 180c is significant considering the fundamentals working in the market's interest.

What has been viewed is a complete lack of confidence, with the major players/exporters sitting out of the market having seen no business written and with little to no appetite to take a position in buying stock. In addition to confidence, the wool market nationally has seen offering after offering where no two lots on the floor present the same visual or statistical qualities, making it difficult for containers to be completed. The longer to fill a container means longer the finance is carried for an exporter, hence eroding the profit on that particular trade.

WHERE TO FROM HERE?

Over the previous decade, the large falls experienced by the wool market average somewhere from 300-350c/kg clean, meaning, given the current circumstances including no end to the US/China trade war, another 150c/kg fall may not be out of the question. Looking at the forward offers, which do spawn from the exporting fraternity, a current quote at the time of writing for Oct-Dec 2019 at 1750c/kg clean for 21 micron supports this trend.

In previous seasons, the length of time for this decline can be a death by a thousand cuts as it dwindles down week-on-week. This fall has been savage and, in tradable US terms, makes the price to Chinese become attractive very quickly.

Overall, however, the fact cannot be denied that the overriding issue in the market has been the expansion of Chinese processing equipment over the last decade. This machinery has an appetite, but it has not had a chance to be quenched simply because the world, in particular Australia, has not had the capacity to fill.

Danny Burkett



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Fixed Time AI Project Update

Capitalizing on Our Best Genetics

ASHEEP has been administering a Meat and Livestock Australia funded Producer Demonstration Site (PDS) over the last three mating seasons aimed at demonstrating the value of integrating Fixed Time AI (FTAI) into commercial heifer joining programs. On enrolled properties, 50% of their replacement heifers were synchronized and AI'd on the planned mating start date. The balance of the heifers were joined as per normal to bulls for natural service. The heifers enrolled in the FTAI program then joined the naturally mated heifers ten days later. The bulls remained working until the close of the breeding season, typically limited to 7 weeks.

The intent of the program was to improve pregnancy rates by providing the synchronized heifers approximately 3 mating opportunities (the first of which was AI) within a 7 week window, compared to an average of 2 and 1/3 cycles for the naturally mated heifers. We wished to demonstrate the potential to reduce dystocia, calf mortality, and heifer mortality by utilizing AI sires with superior calving ease indices and to paradoxically improve calf weaning weights by improving the calving distribution and through the use of AI sires with superior growth rates, and lastly to improve subsequent mating success for the enrolled heifers by ensuring a higher proportion had calved early and with reduced dystocia.

We were requested to develop a defensible estimate of the value of integrating FTAI into commercial heifer programs based upon information gained from the PDS.

The cost of mating was calculated per property based upon the proportion of bulls they would have required for their entire heifer population had they chosen to integrate FTAI (2% bulls +the cost of AI) vs. (3% bulls). The average mating cost per pregnancy was \$144.06 if heifers were AI'd vs. \$119.08 if naturally mated, for a difference of \$24.99.

The cost of an empty heifer was estimated at \$100.00. One of the management practices advocated by Swans Veterinary Services and MLA's More Beef From Pastures is to early and short join heifers. Under this management practice, the mating program is used as a selection tool for reproductive efficiency allowing the empty animals to be redirected into an alternative value chain, usually either to be grass finished or sold on to a lot feeder. The reduction in value of the animal found empty from the 1st mating is therefore relatively small. However, once that animal has fallen pregnant as a heifer, there is a strong financial incentive to improve her subsequent pregnancy rates with a diminishing return on the value of each subsequent pregnancy as she ages and approaches culling age. The salient point is that the 2nd pregnancy rate is the most critical and with the most significant financial consequence. Therefore, an empty heifer has a far lower



true cost than an empty 1st calver. The cost of an empty 1st calver was therefore estimated at \$1,000.00.

Dead heifers, dead calves, and dystocia events were modelled at costing \$1,500.00 for a dead heifer, \$750.00 for a dead calf, and \$100.00 for a dystocia event. Estimating the cost of a dead heifer is fairly straight forward. Estimating the cost of a dead calf was more difficult, with true costs varying depending upon the management practices of the affected producer. Depending upon whether the dam of a deceased calf is culled, the cost could be calculated as the opportunity loss of the value of a weaned calf or as the reduction in the value of the 2 year old heifer should she be sold at the next opportunity. Dystocia costs were modelled at \$100.00 assuming labor costs and potential for veterinary intervention or pharmaceuticals.

It was difficult for most of the commercial producers to visually identify and pair calves to their dams, making it difficult to collect actual weaning weights for this and other trials run on commercial properties. However, two producers did collect that data for us, with an average advantage of 11kgs for the animals derived from the FTAI integrated group over those syndicate mated.

This estimate is feasible as there was a 9.2 day advantage in the calving date of the calves born from the FTAI integrated heifers compared to the heifers naturally mated, 1.3 days of which was likely derived from superior Gestational Length EBV's within the AI sire progeny and the remaining 8 days due to the positive effect of synchronisation. We would expect roughly 9.2 kilos of advantage in weaning weights from this temporal advantage (1kg per day of extra growth prior to weaning). An additional 2 and 5 kilos of weight would be expected at 200 days and 400 days respectively for the calves born from AI, again based on the EBV's of the AI sires vs. those of the bulls used for natural service. 11kgs is therefore a defensible estimate.



Enoch's new way of using a crush. Just a little bit backwards

Fixed Time AI Project Update cont.

MEASUREMENT	FTAI Integrated	Syndicate Mated	Difference	Potential Value	Value Per Pregnancy
Heifer Pregnancy Rate	85.4%	84.0%	1.6%	\$100.00	\$1.60
Dystocia Event	6.3%	8.9%	2.6%	\$100.00	\$2.60
Calf Mortality	4.3%	6.3%	2.0%	\$750.00	\$15.00
Heifer Mortality	0.6%	1.4%	0.8%	\$1,500.00	\$12.00
Weaning Weights (2 Producers)			11kgs	\$2.90	\$31.90
Actual Calving Date Advantage			9.2 Days		
Rebreeding Pregnancy Rate (1 st Calvers)	93.5%	90.4%	3.1%	\$1,000.00	\$31.00
Average Mating Cost	\$144.06	\$119.08	\$24.99	\$24.99	-\$24.99
Total Estimated Value of Integrating FTAI into Commercial Heifer Mating Program					\$69.11

We were able to compile the breed plan figures from the natural sires used on three of the properties and compare them to the breed plan figures of the AI sires.

The averaged Australian Breeding Index value of the AI sires was \$137 vs \$119, an \$18 difference, half of which would be expected to be passed on, for an additional measurable value of \$9 per animal derived from AI, which amounted to 70% within the FTAI integrated groups roughly, or a \$6 advantage to the calves derived from that group.

However, it should be noted that the calving distribution which apparently significantly improved the 1st calver conception rate and the genetic value passed on from the calves derived from AI (should they be retained) would both continue to pay dividends to subsequent calving seasons and generations.

Essentially, all core producers have committed to continuing to integrate FTAI into their commercial heifer programs in the future. This is an astounding outcome considering most of the participants were reluctant prior to agreeing to participate in the PDS. To support this observation, our pre PDS survey data showed that producers that have actually engaged in FTAI are far more positive regarding the process than those unfamiliar with it.

Regarding feedback from the producers involved in the PDS, one of the strongest motivators for adoption has been the calving distribution. 70% of the calves have been born by the due date within the FTAI integrated groups compared to 20% within the naturally mated heifers. Not only does this improve subsequent pregnancy success, but it is perceived as a positive management tool as the calves delivered from the AI sires arrive quickly and with minimal required intervention. In the graph below, Day 0 is the expected due date for the calves based on the mating start date (283 days post mating start date).

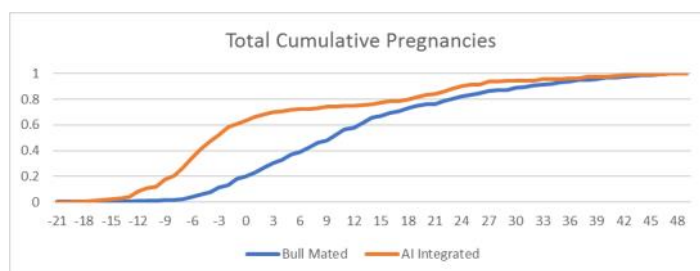


Figure 2: Survival curve depicting the distribution of calves born in relation to the expected calving due date between the FTAI integrated heifers (orange) and the syndicate mated heifers (blue)

Having been identified at pregnancy diagnosis, some producers have been drafting their heifers into calving groups, further allowing better utilisation of labour and feed resources. The animals from the FTAI integrated groups are much simpler to draft at pregnancy diagnosis and their calving events are more synchronised.

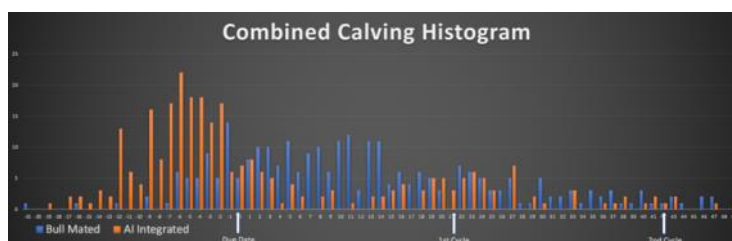


Figure 3: Calving histogram showing the distribution of calves born from the FTAI integrated heifers (orange) vs the syndicate mated heifers (blue)

The entire process has been a real game changer for many of the involved Esperance producers and we expect to see greater uptake amongst southern beef producers across Australia on the back of this ASHEEP initiative.

Dr Enoch Bergman, Swans Veterinary Service

Esperance



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References: 1. Playford, M.C. et al. (2014). Prevalence and severity of anthelmintic resistance in ovine gastrointestinal nematodes in Australia (2009-2012). *Aust Vet J* 92(12):464-471. 2. Monepantel is a member of the Amino-Acetonitrile Derivative (AAD) class of anthelmintics. 3. Refer to registered label. 4. Baker, K.E. et al. (2012). Efficacy of monepantel and anthelmintic combinations against multiple-resistant *Haemonchus contortus* in sheep, including characterisation of the nematode isolate. *Vet Para* 186(3-4):313-317.

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New Gold Sponsor: Esperance Livestock Transport

G'day to ASHEEP members. Having sat in on your last meeting, which was the days after we took over the TRAC business. It became obvious that the group is committed and progressive and it makes complete sense to me that we become involved with the organisation.

My wife Lisa and I are looking forward to supporting the group and getting to know you folks over the journey.

Our first month or so of the Esperance Livestock Transport operation is now behind us, our aims are to remain clear and realistic. Improving the business, engaging with livestock producers, developing an understanding of how we can assist those in the Esperance Community and give Esperance a business that is highly focussed on animal welfare and ethics. We will be a safe, reliable, trusted and compliant locally based transport company.

Learning and understanding the day to day operation of our new business across a number of levels has been our goal for the first couple of months.

Installing reliable internet, branding the equipment, two branded trucks and developing a method of improving, integrating and meshing the operating model to optimise our service levels is what is ahead of us.

Our Staff, led by Bill Kammann and drivers Steve, Lou, Hendo and Nathan have been keen to be a part of our new venture. I can assure all members we are all committed and in for the long haul.

Esperance Livestock Transport have the added advantage of having the extra resources from Mitchell's both at an organisational level and equipment to support the big days without losing control of the required standards and quality during the busy times of the year.

We are looking for the Esperance folk to support us. I will do everything I can to provide support to each customer we interact with. I personally encourage and enjoy receiving feedback of all types from people we have interaction with, without that we will all miss an opportunity to develop the best possible business.
John Mitchell



New Bronze Sponsor: Clearwater Motel Apartments



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Argo Spot: The Tedera Story

EXPLORING THE OPTIONS FOR LANZA TEDERA:

The new kid on the block

The current climate trends in the Esperance region have resulted in many producers seeking out new and novel ways to navigate the lack of summer and autumn rain events and late breaks. One such strategy is the introduction of new pasture species to the fray. Lanza Tedera is a herbaceous perennial pasture legume which was identified by DPIRD in the early 2000's persisting in the dry and arid environment of the Canary Islands, where annual rainfall is as little as 180mm. It is suited to wide range of soil types, and can not only tolerate drought but also some transient water logging.

Its drought tolerance has been proven in trials at Buntine and Watheroo where it persisted in drought conditions for up to 5 months and with annual rainfall of just 150mm. Of course, under these conditions dry matter production and grazing value are reduced and the ideal rainfall environment is greater than 300mm. Therefore, it has an obvious fit in low to medium rainfall zones and there are currently small plots (<10ha) sown in the Salmon Gums region. Although I don't believe it should be pigeon holed like this so quickly, it could also have a fit in the traditionally higher rainfall areas as a permanent pasture to extend the ability to achieve fast growth rates for prime stock out into the summer and autumn months, when marginal conditions manifest themselves, and other summer pastures such as Lucerne may struggle.



Figure 2. Tedera and Lucerne showing leaf retention advantage in March, Mt Barker.

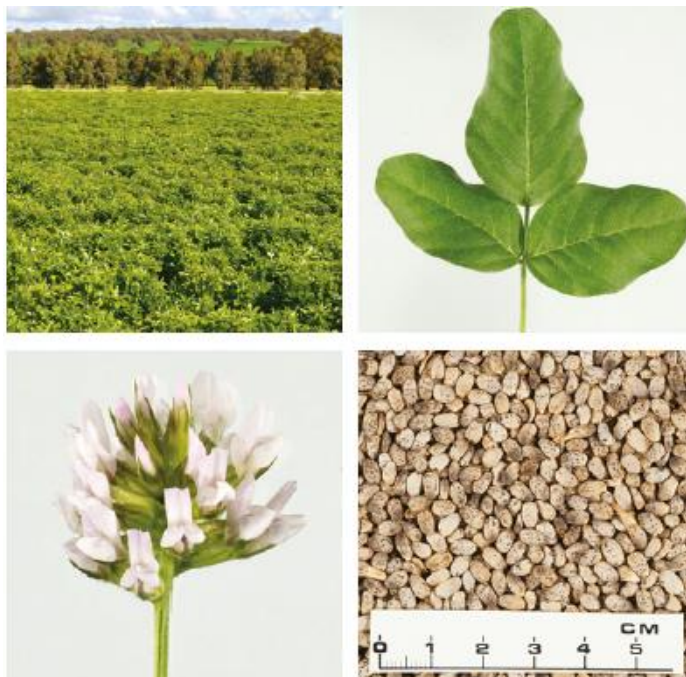


Figure 1. Tedera stand at Dandaragan in winter, trifoliate leaf, inflorescence and seed.

Tedera has a palatability similar to Lucerne (typically 73% digestible dry matter; 17% crude protein and 11.8 ME (MJ/Kg DM)), yet has far greater leaf retention when under heat and moisture stress (figure 2) as well as becoming more palatable in the summer and autumn months. It has shown good grazing tolerance and resilience having recovered from defoliation by locusts in Bealiba, heavy infestation of rabbits at Merridin and being overrun by weeds at Hamilton. These qualities make it a viable hedging strategy to have as an alternative pasture option for high production enterprises when conditions are not favourable for traditional pastures and not just relegated to the lower rainfall zones. With seed only being commercially released this year there is most likely much to be learnt about Tedera in the Western Australian landscape however, it has all the right attributes to become an important part of the pasture mix in the Esperance district.

For more information contact Giles McMeikan
Agronomist Landmark Esperance.



Oestrogenic Clover Infertility In Sheep

We recently investigated a local case of severe infertility with 61% of yellow tag ewes (6 year olds) scanning empty at preg testing. The ewes were grazed in a long term crop grazing, pasture and stubble rotation pattern, where the predominant variety of the pasture phase is Dinninup sub clover. This is one of the old varieties of sub clover that has very high levels of oestrogenic compounds, that can be the cause of short term &/or permanent infertility in ewes. Over a number of years it was identified that this property has had poor lambing results including many difficulties and losses at lambing.

The scanning results showed impact across all age groups including white, blue, red and yellow tags (3 - 6 year old ewes).

- 3 year olds 72% pregnant
- 4 year olds 66% pregnant
- 5 year olds 81% pregnant
- 6 year olds 39% pregnant

This gives an average pregnancy scan rate of 64% across all age groups in contrast to an average conception rate in the mid nineties across other properties managed by the same producer.

DPIRD facilitated the collection of reproductive tracts and livers from seven of these yellow tag ewes at the processor. Histopathology of the cervixes confirmed six of the seven showed uterine changes consistent with clover disease and permanent infertility. It was also noted that ovaries in all these ewes were active and hence they were cycling normally and in good body condition. In addition liver Copper and Selenium levels were all normal. There was no evidence of other contributing factors to the infertility.

An interesting side note is that the veterinary pathologists at the animal health lab had to upskill to diagnose the disease, as it has been so long since anybody had looked for it, and those with the skills had all retired. The pattern of changes were somewhat different to historical records perhaps due to current changes in grazing management with crop grazing and stubbles making up half to two thirds of the annual feedbase, in contrast to historical set stocking on annual pastures.

In addition I believe we are seeing strong evidence of both temporary & permanent clover disease. Temporary clover disease occurs where oestrogen causes increases in mucus volume and fluidity within the reproductive tract which reduces sperm movement and fertilisation of the egg. Fertility usually returns within a number of weeks after removing ewes from the oestrogenic feed source (green clover pastures or clover hay or silage). In contrast permanent clover disease occurs with grazing of

oestrogenic clovers over many years. This form of the disease doesn't resolve when sheep are removed from the offending feed source because there is permanent damage to the uterine lining. Typically with both forms of the disease a reduction in conception rates is seen and increased difficulties and losses at lambing due to inertia of the uterus. Uterine and vaginal prolapses may be increased, and lactation may be induced in both dry ewes and wethers.

In 2018 we had season breaking rains with 80mls of rain in February, and a soft spring with green feed continuing well into November. Hence these ewes were grazing oestrogenic pastures for much longer than in a normal season which would fit with the clinical effects of clover disease being far more prominent than in previous years. When the rams went in, in December, we would have been seeing significant effects from both the temporary and permanent forms of clover disease which explains the poor fertility across all age groups. This also supports the particularly poor result in the oldest age group of yellow tags, although the red tags pose a bit of an anomaly.

It is a wake up call to us all, that we are definitely being impacted by oestrogenic clover cultivars where they are present. It perhaps takes a particularly long season to highlight the potential severity of this effect, but I would suggest that it will be the year in, year out subclinical nature of production losses that are costing us dearly and flying under the radar. Effects will begin to occur when greater than approximately 20% of pasture biomass is made up of the high oestrogen cultivars.

Dr Kevin Foster at UWA is currently conducting a research project to map the occurrence of high oestrogen sub clover varieties. They are measuring the levels of oestrogens in green leaf samples and where possible identifying the clover varieties present.

For free sample kits contact Dr Foster on kevin.foster@uwa.edu.au. Samples are needed before August 26th or could be submitted again in early October if our green feed continues through to then. The lab is closed over September.

Dr Erica Ayers



Dinninup Clover: This variety is commonly found throughout the Esperance district and does have a very distinctive leaf pattern compared to the other cultivars

Drench Resistance Testing

wormboss

A reminder that 2019 is the final year drench resistance testing is available through the Wormboss project.

Weaners are the best group to perform the test on but not necessary if there is another mob which is suspect.

We need WEC of 300epg to proceed.

Last year we found that keeping a mob for the trial (200) undrenched at weaning and performing a FEC 14 days after weaning gave us the required worm burden to perform a resistance test.

Please contact Anita if you are keen to participate by email projects@asheep.org.au or phone 0488 724 888



Save The Date

Spring Field Day

26th September 2019

This years Spring Field Day will be looking at Pasture Trials, Pasture & Spray Trials and Vetch grown on Sandplain among other things

We will also be running the "Show us your Nods" Competition sponsored by Alosca

The day will conclude at the Condingup Recreation Centre with Drinks and a Barbeque

Bronze Sponsor: Ballard Seeds

Weed Wiping – How to take down the "Tall Poppies"!

The idea of weed wipers has been around for some time now. In the 1970's the rope wick applicator came on the scene with the introduction of "Roundup". Although rather limited it was the impedes for the blanket wipers that are available today.

The great advantage of "Weed Wipers" is that you apply a high rate of herbicide to your target plants but leave your desired pasture or crop untreated, and because of this it is possible to use knockdown herbicides such as Glyphosate and or SU's with little effect on Rhizobia. The only requirement is that your target plant must be taller than the desired species.

Cape Tulip, Dock, Radish, Turnip, Rushes, Wild Oats are some of the more popular weeds controlled by the weed wiper, however we have clients that use these machines to control weeds such as Barley Grass, Wimmera Rye Grass, Thistles, Bracken, Patterson's Curse, Guilford



Grass in fact anything that has that height differential can be controlled.

Quite often it is a matter of timing and or grazing management to give the height differential. When plants bolt and send up their flower spikes is a perfect opportunity to hit them. Tulip and Rushes on the other hand have a greater time window with the nature of their growth.

One of the great tricks with weed wiping is keeping the mats sufficiently wet without dripping. Taking the guess work out of this problem is the "Weed Swiper X". This is a cost-effective control unit that senses the electrical conductivity between two sensor plates which are fitted to a section of matting. As the mats get wetter, they can transfer more current and at a point the control unit will interrupt supply of the chemical solution.

We have two 8 metre units in stock available for immediate delivery currently. ATV modules are also available, and the ingenuity of many farmers have seen our modules hung on loader buckets 3PL platforms old harrow bars or the favourite is to convert an old spray unit.

With solution application rates around 0.5 -1 litre per hectare these units only require a small tank and pump. If you have any queries on weed wipers, we would love to have a chat.

Ross Major, Manager
Ballard Seeds
175 Federal St, Narrogin WA 6312
Ph: (08) 9881 5711
Email: sales@ballardseeds.com.au



Annual AGM & Conference Review

The annual AGM and conference was held on 20th of June this year at EBYC and for the first time featured a dinner with speaker. The day (and night) was a resounding success. Ella Edwards, junior Editor at Woolmark magazine was the keynote speaker at our inaugural dinner and outlined how Australian wool is being marketed by Woolmark. She outlined the marketing techniques such as social media and targeted online advertising as well as current trends impacting customer behaviour and how wool is meeting the modern customer's demands. Ella bought with her some wool garments which represent the modern textiles which Australian wool is being used for around the world in high end fashion, outdoor wear and activewear including a 2018 Boston marathon competitor uniform (washed of course).



Photo by Emma Iddison

Mark Ferguson from nEXtgen Agri, a consultancy business specialising in breeding, spoke on the role technology can play in enabling sheep and cattle producers to make timely

and well-informed decisions. Mark spoke about some of the R&D projects he is involved with including facial recognition of individual sheep with 99.7% accuracy.

Alan Langford, Chief Economist at Bankwest gave some in-depth insights into current interest rate trends and worldwide factors which are influencing them.

Steven Read, CEO of Michell Wool gave an excellent presentation on Michell's operations and the current and future issues which he sees as important on a manufacturing and farm level. The current consumer trend of 'high animal welfare' is starting to shift to 'sustainably produced' products, with many leading fashion houses working with suppliers and farmers to guarantee sustainable products for the consumer. This is good news for wool because it is head and shoulders above rival animal-based textiles. Steven emphasised the importance of filling out the National Wool Declaration form at shearing because this is the information they use to promote Australian wool to their customers. Currently, only 70% of NWDs are filled out so check with your classer and agent that yours is done before selling. Steven predicted a drop in the wool price due to recent trade tensions between China and USA reducing consumer confidence in China and globally. There is an increasing cost of milling in China which is causing many early stage processing plants to close down or move to locations with cheaper cost of production, which indicates that the record high wool prices experienced early this year may not be sustainable in the long term.

Todd Fotheringham, a cattle feedlotter from Hyden and president of WALFA, has sourced a lot of cattle from the Esperance region and is well known to many cattle farmers in the district due in no small part to the late Peter Gale who will be sorely missed. Todd talked us through the growth of his feedlot operation from a small opportunistic setup to an efficient and modern 5000 head feedlot. He also spoke of the role WALFA plays in ensuring the whole feedlot industry maintains its competitiveness and values the crucial link between breeder and feedlotter.

Special mention goes to Simon Fowler, our outgoing President who has been replaced by Mark Walter. Simon has contributed a lot of time and effort to the group over his time as president and both his enthusiasm and experience have had an impact on the ongoing success of ASHEEP over the past 3 years.



Jan, Mark, Thomas, Karl, Ken, Simon, Scott, Alan, Anita & David
Photo by Emma Iddison

Anita Chalmer provided a review of the South Africa Tour. August last year, a group of 12 intrepid Aussie farmers ventured abroad to the Western Cape region of South Africa. Guided by our fearless leaders, Prof. John Howieson and Neil Ballard we set out to explore South Africa. The place is a colourful mix of culture and chaos with abundant natural beauty and stark contrasts. We met people who lived happily in a tin shack, and were welcomed to tour a billionaire's private estate (touched a Ferrari). We sat in a vehicle metres away from a lion knowing that one of the wheels was only held on with three wheel nuts and the bearing was about to go. We dined on springbok, ostrich, buffalo and kudu. We followed a beggar boy to a restaurant through dark streets and back alleys in Cape Town. We dined at acclaimed restaurants and bought lamb chops for \$3 from a street vendor fresh of a coal bbq in the carpark of a service station. We saw snow capped mountains, lush brown loam plains and harsh sandy heath land.

The temperate Mediterranean climate is very similar to Esperance and most farms are running a mixed sheep and cropping rotation. The pasture quality is quite different to home with a distinct lack of productive legumes in the sward. In most sites which we visited nodulation was very low. The most recent improvements in whole farm productivity are occurring with the use of diverse cover crops. A cover crop is a sacrificial crop which is used to build soil health before a cash crop. Research into cover crops is being led by Johann Strauss, West Cape Govt. who organised the tour.

This tour group is the first Australian farmers to see *Lebeckia* in the wild. It is a leguminous shrub which grows in light acidic sand, low in nutrients and water holding capacity. This plant is incredibly productive where most other plants are struggling. We look forward to seeing it growing in Esperance conditions in the near future.



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The Importance of Ongoing Vaccination for OJD

Below is some information on the importance of continuing to Vaccinate against OJD.

Last year was the first full year of vaccinating in the Esperance area, it is estimated that 90,000 doses of Gudair were sold, to the end of July it was estimated 74,000 doses had been sold.

We will continue to monitor the number of doses sold in the Esperance area.

We would like to encourage farmers to put the “V” tag in their approved vaccinates. There have been \$100-\$150 premiums paid for Approved Vaccinate sheep.

One final note; if you are considering keeping any wethers don't forget to vaccinate them as well. Unvaccinated sheep that are 18 months to 2 years old will be shedding OJD.

VETERINARY OPERATIONS

TECHNICAL INFORMATION UPDATE

Australian Study Supports Ongoing Use of Gudair®



Researchers at the University of Sydney have found that whilst Gudair reduces the prevalence of OJD within a flock, ongoing vaccination is essential to ensure the prevalence of OJD within the flock remains low, minimising losses due to this disease.

Background

Ovine Johne's disease (OJD) is an insidious disease which continues to cost farmers through lost productivity, increased stock losses and reduced trading options. Sheep infected with OJD can be actively shedding the bacteria for years before clinical signs are seen. These “shedders” will continue to be a source of infection on a property, and in a region, for many years.

In a recent Australian study researchers followed 41 self-replacing Merino flocks infected with OJD. These flocks had been consistently vaccinating lambs with Gudair for at least five years. Estimates of the prevalence of OJD within the flocks before the vaccination program commenced were compared to the prevalence of OJD within the flocks following five or more years of vaccination. In addition, the farmers were surveyed to identify which risk factors increased the likelihood of having a high prevalence of OJD infection within a flock.

Results

Dung samples were collected from all flocks to determine their OJD status and the level of OJD bacteria being shed in dung and contaminating pastures.

The key findings were:

- Gudair significantly reduced the prevalence of OJD within a flock.
- Shedding of the OJD bacteria was still detected in over 80% of flocks even after five years of consistent vaccination.
- Those flocks with a high level of OJD shedding reported that they had introduced new sheep or had straying sheep in the past five years.
- Farms where sheep were introduced were three times more likely to test positive for OJD, despite ongoing vaccination.
- The authors concluded that ongoing vaccination with Gudair is essential.



What does this mean?

Gudair has been shown to reduce deaths due to OJD by 90%. The vaccine has also been shown to reduce shedding of the OJD bacteria in the dung of infected flocks by 90%. However, Gudair does not completely prevent bacterial shedding in all vaccinated animals.

As many farmers with an OJD-infected flock see the benefits of a Gudair vaccination program, in the form of a reduction in visible disease and stock losses, there may be a temptation to cease vaccination.

The study reported here has shown that after five years of consistent vaccination of lambs with Gudair, there was evidence of continued shedding of bacteria in over 80% of the flocks examined. Therefore, should vaccination cease, any unvaccinated stock on the property are at risk of developing clinical disease and dying due to OJD.

In addition, buying in stock was found to be the primary risk factor in having a high prevalence of OJD within a vaccinated flock.

Conclusion

To control OJD it is important that flocks continue to vaccinate their lambs, take care when sourcing stock for purchase by requesting a sheep health statement and ensure any bought-in stock have been vaccinated, preferably as lambs.

Don't risk your flock, your neighbours' flocks or your trading options and ensure that all lambs are vaccinated with Gudair at marking.

For more information call Zoetis Veterinary Operations on 1800 814 883 or contact your local Zoetis Professional Sales Representative.



References

1. Windsor PA, Eppleston J, Dhand NK, Whittington RJ (2014). Effectiveness of Gudair® vaccine for the control of ovine Johne's disease in flocks vaccinating for at least 5 years, *Aust Vet J*, 92(7): 263-268.
2. Reddacliff L, Eppleston J, Windsor P, Whittington R, Jones S (2006). Efficacy of a killed vaccine for the control of paratuberculosis in Australian sheep flocks, *Veterinary Microbiology*, 115: 77-90.

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Fall Army Worm meets African Swine Fever

Pests and disease are playing on the outlook for China's grain balance sheet according to Rabobank senior grains and oilseeds analyst Cheryl Kalisch Gordon.

With African Swine Fever (ASF) reducing the pig population, Dr Kalisch Gordon says feed grain demand in the country has fallen. But now infestations of Fall Army Worm, a pest that can devastate crops, have been found in China's corn crop.

Rabobank now forecasts ASF will result in a 40 per cent decline in the Chinese pig population this year and a 35 per cent decline in China's hog feed demand.

"However in response to the higher meat prices that will result as pork availability declines, we expect an increase in the population of alternative protein sources, including poultry," she says. "Broiler and layer numbers have already grown and are expected to increase considerably more, along with aquaculture production."

Taking this into account, Dr Kalisch Gordon says the net result is a forecast decline in Chinese demand for feed grain of 13 per cent in 2019, and a marginal rebound of two per cent in 2020.

However, demand for corn feed is expected to experience less decline, due to lower imports of alternative feed grains as a result of trade tensions, she says.

"With US sorghum, soybeans and dried distillers grain – and Australian feed barley – all under the cloud of trade tensions, reduced year-on-year availability of, particularly, US sorghum and Australian feed barley in China is inevitable," she says. "With reduced availability of these alternatives, we expect higher inclusion of Chinese corn in feed rations, so that feed corn usage will be down by just eight to nine per cent this year."

Meanwhile, Dr Kalisch Gordon says China has an invasion of Fall Army Worm (FAW) to contend with. The pest, from Central and Southern America – and not found elsewhere until discovered in Africa in 2016 – was identified in China in early 2019. A FAW invasion has the capacity to destroy crops seemingly overnight as its peak consumption comes rapidly in the final larval stages of development.

"China is currently right in the middle of its corn-growing season and FAW has been found in 20 provinces, including some corn-producing regions in northern China," she says. "To deal with the invasion, the Chinese government has recommended 25 pesticides for emergency use against FAW."

Given this pest is new to China, Dr Kalisch Gordon says resistance is expected to be low and control effective.

"On this basis, the impact of FAW should be just a small blip in the context of China's annual 200 million-tonne corn crop and well short of the forecast reduction in corn demand caused by ASF," she says.

"However, with the capability of the invasion to triple in size each week, as it did in the last three weeks of June, the potential of FAW to materially reduce Chinese corn production into the future is real."

This comes at a time, she says, when China's corn consumption has outstripped production for the fourth consecutive year and the massive stocks that peaked at the end of 2015/16 are being run down.

Dr Kalisch Gordon says ASF will generate demand and price support for all proteins for at least the next five years as China rebuilds its pig herd and pork production.

"For the Australian sheep and beef producer this will mean ongoing strong demand from China," she says.

"For the Australian grain producer, this could add to feed grain demand in Australia, however the strength of that impact will be mostly dependent on local seasonal conditions in coming years. And the direct impact on Australian feed grain exported to China is likely to be minor, and distorted by trade tensions, in the short-term."

Into the longer-term, Dr Kalisch Gordon says if China does not alter their domestic support policies, demand for Australian feed barley may again rise.

To find out more about other Rabobank research, contact Rabobank Esperance on (08) 9076 4200 or download the RaboResearch podcast app.



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Grant is a third-generation farmer, and just like his father before him, he’s proud to see the family farm being passed on to sons Tim and Mitch. Relationships based on trust and honesty are important to Grant, perhaps that’s why his first point of call for a recent expansion was Bankwest. As a WA business ourselves, we like to get to know you and your business.

See Grant’s story [Q Bankwest In Good Company](#)

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Grass Fed Finishing Systems



Grass Fed Finishing System

- Thursday 12th September 2019 -

All farmers are welcome to join the ASHEEP Cattle Committee on their Annual Cattle Field Day.

- 1pm **Condingup Tavern, Car Pool for Farm Visits**
- 1.30pm **Ryan Willing, Condingup Block– Grass Fed Steers**
- 2.30pm **Rob Revell, Mt Howick Station– Grain Assisted Heifers**
- 3.30pm **Simon Fowler, Orleans Farms –Grass Fed Steers**
- 5pm **Condingup Tavern—Drinks and Networking**

We will also have discussions in the paddock with:

- * Enoch Bergman, Swans Vets - Early Weaning & the MLA Funded, Fixed Time AI Project Results
- * David Howey, Elanco - HGP's and Growth Rates
- * Tom Wilding Davies, Woolworths - Marketing
- * Ryan Meldrum, Rabobank - The Beef Market and Price Outlook



The day will conclude with a few drinks at the Condingup Tavern

RSVP to Jan Clawson on 0407 990 497
or janclawson@bigpond.com

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