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ASHEEP NEWS

asheep Esperance

Case Study: Lamb like a Hoggart

ASHEEP interviews Alan Hoggart

Alan and Rebecca Hoggart run a flock of 6400 Ultrawhite/Kojak ewes and rams, who from the looks of the image above, are not short-changed when it comes to a good view.

Without a wool-cheque to consider, the Hoggart's management strategy is highly geared toward ensuring that lamb production is optimised. They achieve impressive lambing percentages and with joining just around the corner for many of us, we thought now would be a good time to drill Alan on how their program works to maximise lamb numbers.

System overview

The Hoggarts farm 2000ha of pasture on coastal land east of Esperance, near Condingup. Alan describes the sheep operation as "probably being not too much different from most farmer's programs, except for the breed of sheep". The Ultrawhite/Kojaks are a shedding breed that require no shearing, crutching or mulesing.

The production cycle begins in November, when all ewes are treated with Closantel for Barber's Pole worm given that the coastal area is susceptible for it. As the weather warms up and dries off, ewes are given access to Calcium Sulphur lick ad lib until it gets too wet in winter.

Mature ewes (1.5 yrs+) are mated in last week of January at 2% rams for 5 weeks. The rams then all go in with the ewe lambs for a following 5 or 6 weeks. Ewe lambs are given Campyvax when the rams go in and when rams come out.

Continued over page. Image: Alan & Rebecca Hoggart's lambing ewes this year.

Highlights

Continued from cover.

Once the deed is done, mature ewes are scanned for multiples. Anything that scans dry is sold - with no marketable fleece, if a ewe does not produce a lamb there is no income.

Managing mob size is an important part of the Hoggart's strategy for lamb survival. Twin bearing ewes lamb in mobs of between 50 and 200 depending on paddock size and receive the the best shelter. Single bearing ewes lamb in mobs of up to 500.

As far as treatments go, all ewes receive 3in1B12S, Eryvac and an oral drench pre-lambing at the start of June. Twin bearing ewes get and extra 1ml shot of B12. Ewe lambs receive a long-acting drench pre-lambing to give them the best treatment.

Alan reports that total lambs marked to mature ewes (1.5 years and older) scanned in lamb for the last two years has been at or above 140%.

Farm Snapshot

Location: Condingup

Av. Annual Rainfall: 625mm

Enterprise Mix: Sheep, no crop currently

Feedbase: Annual is ryegrass with serradellas and clover. Kikuyu on sandy country.

Stock: 6400 Ultrawhite/Kojak ewes and rams

Team: Alan and Rebecca Hoggart

What do you feel works well in your system?

- Lambing in late June/July: We have matched our pasture growth curve to stock feed requirements which has minimised hand feeding.
- Calcium lick: We have a lot of kikuyu pastures which causes a calcium deficit in the ewes. I used to lose a lot of ewes to dystocia. The lick has almost eliminated this loss.
- Mating ewe lambs after main line: Allows for extra maturity. We cull our ewe lambs pre-lambing on size and conformation and again post scanning on the empties.
- For the last 6 years we have focused a lot of energy on developing 2 tree farms. Having low-labour sheep has enabled this to happen with just Bec and myself as workers.

What are you focusing on to lift your lambing percentage?

- We need to get more shelter for lambing paddocks. Multiple day winter storm events can take a toll. We have let some bluegums coppice after harvest and will hopefully be planting more mallees for shelter in the future.
- Wet and drying ewes at marking will identify poor mothers, which can be repeat offenders or unable to carry lambs full term.

Image: The Hoggart's 1 year old ewes with their lambs (born September), photo taken mid-November 2020.

Case Study: Dryland Legume Pasture Systems

ASHEEP Interviews Mark Walter & David Vandenberghe

Since 2018, ASHEEP has been taking part in the Dryland Legume Pasture Systems (DLPS) project in conjunction with Ron Yates and his team at Murdoch University. The project is focused on boosting profit and reducing risk on mixed farms in low and medium rainfall areas through the trial of newly discovered legume pastures.

We had the opportunity to visit the trial site at David and Katherine Vandenberghe's Grass Patch property at the Winter Field Walk this year. Rob Harrison took us through the varieties on show and there was a lot of interest from producers to see more of them become commercially available. There is also a second trial site at Mark and Liv Walter's in Cascade, which is looking at Nitrogen transformation.

Here we interview Mark and David to get their take on the trials and the impact that the project has, or could have, on their farming systems.

Mark Walter - Cascade - Nitrogen transformation trial

The DLPS site at the Walter's was established in 2018 with Medic pasture, mostly self-regenerated. The trial also included small strips of Trigonella. 2018 turned out to be a poor year for pasture, with 7mm of rainfall in May and 15mm in June. This resulted in a poor initial establishment which continued for the remainder of that year, with subsequent low biomass produced.

2019 continued the rotational trial at Walter's - cereal, fallow and pastures (vetch and medic). In 2020 it was all cropped to sceptre wheat with N rates to determine responses in yield, protein and screenings.

Farm Snapshot

Location: Cascade

Av. Annual Rainfall: 400mm

Farm size: 12,000ha

Enterprise Mix: Cropping and sheep

Typical rotation: 2000ha pasture, remainder in crop.

Stock: 3000 mated ewes and followers

Soil type & pH at trial site: 7.5 pH, grey clay

How has your trial site performed and what seasonal conditions have impacted it?

Unfortunately the trial site has experienced our three lowest rainfall years ever, which has impacted the biomass growth of the pasture. The wheat crop that has gone in over it this year looks reasonable and may be average, but I'd say any differences will be more a fallow effect than anything.

What has caught your eye from the trial?

The trial has shown that medic does not perform in our system anymore. We had vetch sown around the outside of the site in the first year which went well considering the rainfall compared to the Medics. The Trigonella has also performed well on this soil type and we will be excited to try some when it is available. I understand the concept of the trial is to grow nitrogen for the following crop, but I think that due to the seasonal conditions it will be hard to prove that from this site.

How do you see the learnings from the trial impacting your system?

In that same soil type we have traditionally had medic pastures. Over the last ten years we have cropped these medic pastures to an extent where plant numbers are no longer viable. We have tried biserulla on this soil type which has performed well on the sandy soil types and gravels, and produced seed well, but has struggled to produce much biomass, plus the photo sensitivity problem.

Above: The rotational trial in 2019 at the Walter's.

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We have had good success with Santorini and Margarita Serradella on our sandier soils and will continue to establish these. On the heavier clays we have grown mainly RM4 Vetch. There is a significant cost to establishing Vetch every year but we are finding we get a longer season length, grazing from April to October (if it remembers to rain) and significantly more biomass on a consistent basis.

We have also found that subsequent cereal crops are consistently up to 1 t/ha better the year following medic or canola and between 1% - 2% better protein. This has meant that for two cereals after the Vetch we use significantly less nitrogen (up to 50 units less) than after a canola.

What further research would you like to see come out of the trials?

We would like to see the progression of the new varieties continue. There are not a lot of options for this soil type other than medics and now vetch. Seeding all your pasture, every year, shouldn't be ruled out as it is achievable for most people now at a low operation cost if there is a biomass and rotational benefit. I think Trigonella could have a good fit on these soils as well as long season vetches.

Making nitrogen decisions on crops is one of the most contentious issue that we have every year. Any research into how much is available after a good pasture in the first and second cereal crops following is excellent information. We need simple ways of knowing this rather than guessing.

David Vandenberghe - Grass Patch - Varieties & seeding trial

Run us through your trial site.

The trial site has run at ours in 2018, 2019 and 2020, trialling a wide range of new legume varieties. Initially we started with 40 genotypes ranging from Vetch to Scorpiurus, Trigonella balansae, Bladder Clovers, Medic, Serradella, Lotus, Helmet Clover and more.

Many of these genotypes have never been grown in Australia. Initially seed was collected in the early 90s, mostly from the Mediterranean. Then it was a process of picking out a few possible winners and refining that down. So the second year the species of the most interest were resown, down to the third year which is most likely the ones they will commercialise (looking to be 2 or 3). Frano Serradella has already been commercialised.

How has your trial site performed and what seasonal conditions have impacted it?

It has probably underperformed in the fact that we have had three very dry starts and low winter rainfall. In saying that, the first year there was some carry over sub-soil moisture which allowed the Trigonella balansae to stay green until almost January. Last year the site was impacted severely by frost and a terrible spring.

Farm Snapshot

Location: Grass Patch / Scaddan / Gibson

Av. Annual Rainfall: 400mm

Farm size: 6000ha

Enterprise Mix: Stud stock merinos, commercial merinos, cross lambs, wheat & barley.

Typical rotation: 2 cereal then pasture, other farm pasture then cereal

Stock: 8000 head - merino and also lambs crossed with White Suffolk

Soil type & pH at trial site: 7.5pH, heavy clay loam

Above: Lotus (left) and Scorpions Tail (right) in the trial site at the Vandenberghe's.

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What has interested you from the varieties planted in the trial?

Definitely the Trigonella – I like the fact that it can carry on into the spring and it is aerial seeded which allows us to harvest it easily. The other thing I would be very interested in is mixed swards; multiple species that will complement each other to give us a better feed base throughout the year. To get full benefit we have to be able to early-seed a variety. We need to have species that can be summer sown to get early feed and utilise what moisture there is.

Is there anything of note in relation to seeding techniques?

Some of the larger-seeded varieties need to be seeded a little deeper. For example, the Snail Medic needs to be seeded a little deeper than what I had thought. Early competition is also critical as can be seen from areas in the trial where the background Medic is dominating. It's also crucial to get exactly the right inoculant – the Scorpiurus struggled because it didn't get the right inoculant.

Have you planted any of the new varieties from the trial yourself?

I haven't yet – the only one that has been released is Frano. Certainly I will once more have been commercialised. I'm really liking the look of the Trigonella and a short-season Bladder Clover.

The trial has led me to look further afield to different varieties such as Sulla (a Biannual legume that grows like rocket fuel with massive tap root). It stays alive for 2 years at least, it dies off in summer but responds really quickly to rain from the root stock and you just about can't kill it. I have bought half a tonne to seed 150ha as an experiment. It will be good for the autumn and spring feed gaps. It's a bit like lucerne but tougher and loves sodic clay.

Below: Trigonella in the Grass Patch trial site.

Image above: Sulla.

How do you see the role of the legume benefiting your cropping and livestock operation?

Definitely by providing extra nitrogen for the crops and also by building up organic carbon. Another important aspect is to fill in the feed gap with some of the deeper-rooted varieties like Serradella and Trigonella.

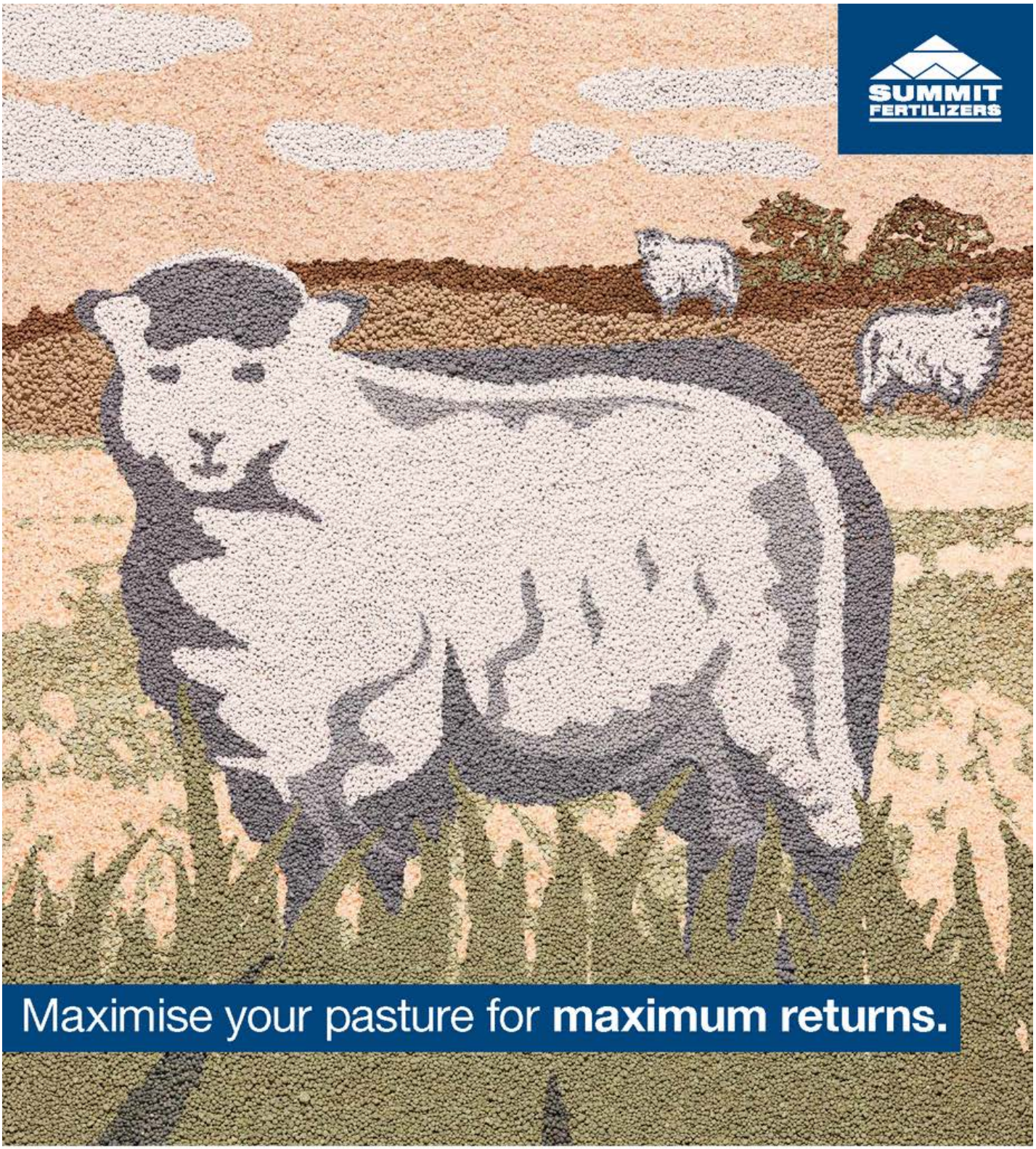
It's obliviously too early to be working with the varieties from the trial, but in future we look forward it and the opportunity to increase livestock numbers as a result. It is really hard this time of year with the feed gap we have before the stubbles are available. If we could keep the stock going for an extra three weeks it would make a huge difference.

Another benefit is going to be reducing wool contamination - clover burr is a big issue. It looks like for most of the legumes in the trial this won't be an issue.

What further research would you like to see come out of the trials?

I'd definitely like to see more done on herbicide applications and also seeding complimentary species together to establish a good mix instead of just looking at monocultures. I'd like to see the trial continue and maybe even collect more species overseas each year to see if we can find something new. We need funding to go into these sort of things to find the next successful legume to take production up to the next level.

This project is supported by funding from the Australian Government Department of Agriculture and Water Resources as part of its Rural R&D for Profit program, the Grains Research and Development Corporation, Meat and Livestock Australia and Australian Wool Innovation. The research partners include the South Australian Research and Development Institute, Murdoch University, the Commonwealth Scientific and Industrial Research Organisation, the WA Department of Primary Industries and Regional Development, and Charles Stuart University, as well as grower groups.



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Dermo Alert – Check your flock after recent rains

Anita Chalmer, local producer & ASHEEP Project Officer

This spring, there have been reports of dermo showing up in the Esperance region. Dermo is a skin condition which causes lumpy scabs to form in wool, leading to several problems including increased risk of flystrike, reduced wool value as well as ill thrift and the risk of the condition spreading to humans or other stock.

Fleece rot is different to dermo and can be a precursor to (or occur alongside) dermo and occurs when the wool is wet to the skin for prolonged periods. The suint in the wool blends easily with moisture and emulsifies the protective wax layer, leaving the skin vulnerable to irritation and causing an inflammatory response. Once the skin is affected many strains of bacteria can proliferate and cause a variety of fleece rot.

Infection by the bacterium Dermatophilus congolensis causes the skin to become inflamed and release an exudate, forming scabs and the characteristic 'dermo' lumps in the wool. In some individuals it then becomes a generalized skin infection, typically over the back, flanks and upper surfaces of the body. The matted lesions are susceptible to flystrike when they become wet. The lesions slow drying of the wool and this increase the risk of strike. Under dry conditions, the lesions generally heal and the scabs will eventually lift, leaving normal, wool-producing skin beneath. With chronic lesions which can take up to a year or more to heal, a persistent lesion develops along the whole length of the staple.

Image: Dermo six weeks after treatment with antibiotics. Source: Livestock Diseases in Australia, CH Jerram and Associates, Science Publishers, 2006.

Four conditions must be present for sheep to become infected with dermo:

1. A source of bacterial spores (active lesions/scabs)
2. Moisture to release spores from the scabs (wet weather, dipping)
3. A means of transfer of spores, in particular close contact
4. A break in the wax layer on the skin (young lambs, shearing cuts, existing skin irritation)

Prolonged wet periods where the fleece is wet to the skin can cause irritation and a mode of entry past the cuticle layer if spores are present. When wet sheep are yarded together, the bacteria can spread easily between animals. Moisture can come from rainfall or dipping. Usually immunity develops over 6 weeks but some animals remain infected and can be the source of new outbreaks from benign lesions on the face and ears.

Dermo commonly occurs in small lambs because they haven't built up immunity and the protective wax layer on the skin does not form until 5 weeks of age. Severe infections can cause ill-thrift and even death.

Prevention is easier than treatment and can be done by avoiding holding newly shorn sheep in yards soon after shearing where cuts may introduce spores. Cull animals displaying conformation faults which allow moisture to collect next to the skin. Also cull animals which are persistently infected as these transmit the disease when conditions are right. Select for fleece which is waxy and resists water infiltration or rapid drying as is more resistant to developing dermo. If you have a severe infection, contact your vet for advice on how best to treat or manage the problem.

The Evolution of ASHEEP Esperance

Bob Reed, ASHEEP Committee Member

With the awarding of Greg Bannon's Life Membership of ASHEEP this year, Bob Reed has provided the following article to take us back to the early days of ASHEEP, when Greg made contributions that have been critical to the group's success.

I have fielded a lot of questions in recent times about how and when the ASHEEP group got started. I was there for all that but my memory didn't contain all the detail and timelines. Nor did we have a Secretary to take notes back then. What I have got and have researched are my work diaries which are accountable for dates but light on for detail. It goes a bit like this:

20th Sept 2002
ERP were selling up the final portions of their estate. Mick Quinlivan, the Chief Manager, and Greg Bannon, the Sheep Manager, came to my office proposing to set up a sheep production group. They proposed something like SEPWA which was running very successfully and providing excellent data and feedback for their members, all of which was enhancing crop outcomes. We readily agreed there was a need for something similar for our regional sheep producers whose flocks were diminishing in favour of crop. This was significantly impacting the attitudes of Esperance's second generation of farmers, who in fairness, had probably not had a lot of encouragement about sheep from their fathers emerging from the wool stockpile disaster and modest price outcomes continuing for wool and sheep meats.

The three of us agreed that it was modern machinery and technology and improving yields that was attracting the new generation farmers away from sheep. Conversely, sheep production was stuck in a rut. Could we find new technology and ways to increase sheep production to a level that would or could enthuse the new generation to stay with their programs, in association with crop, was the question. To answer this we felt we had to set some new and higher sheep production targets and define a way to reach them. Firstly, we needed to get a few more people on board.

Oct 2002
We held two meetings in this month. Firstly, we contacted some 20 progressive mixed farmers and bounced our above ideas off them. We got a positive reaction, so we ran another meeting canvasing farmers out to Ravensthorpe. A Steering Committee was forming itself by this stage, with John Wallace and Tom Murray getting themselves involved with the original three of us. The local Department of Agriculture also took an interest and offered the services of their then Acting Sheep Extension Officer Sandra Brown who agreed to provide administrative assistance if we could find sufficient numbers to commence a regional production group.

Nov / Dec 2002
Four Steering Committee meetings were held in this period up until 9 December 2002. One of these meetings was with James Rowe and Kevin Atkins of the newly formed National Sheep CRC. We had wanted to call our group ESHEEP (E for Esperance) however we found that they had already registered that name for a project with electronic tagging and drafting which was new technology in 2002. We couldn't convince them to let us use it and so we agreed to go with 'ASHEEP', meaning Association for Sheep Husbandry, Excellence, Evaluation and Production. I must admit the word ASHEEP came before the definition, a bit of a mouthful, however, looking back that brand has worked well for us.

17 Dec 2002
A meeting for all parties interested in forming a sheep production group was advertised for 4PM on Tuesday 17thDecember 2002. This was well attended, not only by sheep farmers but also by industry connected businesses in town, particularly stock agencies, suppliers and transporters. An Interim Committee was formed and charged with delivering a workable Constitution prior to the initial AGM. This Interim Committee worked hard to identify some progressive and innovative projects to kick off on and in this regard we found some good and interesting opportunities for new directions to take to the first AGM.

16 April 2003
ASHEEP's first AGM commenced at 3PM on Wednesday 16th April 2003 at the Department of Agriculture with nearly 50 people in attendance. A Constitution was delivered and the Committee then formally endorsed. Bob Reed was elected as the inaugural Chairman. We had work ready to go and places (Focus Farms) arranged to do it on. These being:

- David Egan, Tyrell's Rd – high density stocking in rotation plus fox proof fencing for protected lambing areas.
- Ash Reichstein, Wittenoom Hills – agreed to test and trial electronic tagging and drafting on a NZ built auto-drafter and handler bought by ASHEEP, which was, I think, the first one of its kind into WA.

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- Greg Bannon, Ex ERP – Greg put up a target to the group to define a sequencing formula that could and would, if properly followed, produce a 100% plus outcome for lambing. A bit like SEPWA's 3 Tonne Club this represented a giant lift above existing levels. Greg had already started twitching with this in his last year at ERP.

Early forward from 2003

ASHEEP got a lot of traction from their first projects and were able to publish some interesting data. We were also beginning to look hard at pastures and a long term, still existing, relationship with the Ag Department's researchers Brad Nutt and Angelo Loi was established in this early period. ASHEEP have continually supported regional pasture trials since.

But if there was one stand out thing that put ASHEEP on the map early it was the Lambing Planner. Greg Bannon's brainwave was to become a reality after workshopping the concept with his early colleagues at ASHEEP and importantly getting valuable input and support from Mandy Curnow and Peter Robson from Ag Department Albany, a final working product was produced in these early days of ASHEEP.

It's history now that the Lambing Planner was a very successful product that became distributed throughout Australia and NZ and has recently been adopted and amended by the British sheep industry as a template of their own. Importantly this project brought ASHEEP to the attention of AWI and MLA and we have enjoyed very good working relationships with them on a large number of projects since. ASHEEP, a not-for-profit organisation, registered the International Property Rights, but gave licence to the Ag Department to print and distribute and sell.

Unfortunately, the sale of ERP saw a lot of their former employees scatter across Australia either looking for work or a home where they originally came from. Greg Bannon was one of these and resides in Quorn SA. Greg's intuition and drive was integral to getting the Planner completed but he wasn't around when it was being distributed and appreciated. Greg, a quiet and modest man, needs to be recognised for his fantastic contribution in the very early days of ASHEEP.

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Agro Spot: Add water, Add N!

Theo Oorschot, Esperance Rural Supplies, 0427 715166

The 2020 Esperance Rural Supplies pasture trial programme took the best from what I learned from last year's trials and re-shaped it into something simple and concise. The trial site was again located at Wayne and Tracey Lewis' property north of Gibson.

However, another dry start with no sub soil moisture made me rethink and change the seeding date to when I was more confident of attaining a good germination of the species wanting to seed. 83mm of rain had fallen from the months January to end of April. And a further 32 mm in May (10 rain events!)

The trial this year was sown 10th June. Unlike last year, when the seeding date was 23rd April and the brassica's Leafmore Forage Rape and the Dynamo Turnip were outstanding in dry matter production, this year they were failures and struggled to grow a lot of biomass quickly. Diamond Back Moth also played havoc, and probably "in the real world " could've and would've been managed with grazing!

Again, I included Margurita serradella and RM4 Vetch as the stand out legumes from last year's trial and Dictator 2 forage barley and Tetila ryegrass. Dictator 2 is an early, quick to feed forage barley that can be sown from early autumn through to late winter and recovers quickly from grazing. Tetila ryegrass is a tetraploid short-term ryegrass and was included in this trial because it is cheap.

Species	t/ha DM
Dictator 2 Barley Nil FN	7.92
Dictator 2 Barley 100 FN	8.99
Dictator 2 Barley 200 FN	8.71
Tetila Ryegrass Nil FN	3.48
Tetila Ryegrass 100 FN	5.48
Tetila Ryegrass 200 FN	5.96
RM 4 Vetch Nil FN	2.36

Flexi-N was applied as a single application on the 13th August at two rates, 100 Lt/ha (42N) and 200 Lt/ha (82N) across all of the species.

Table 1: Dry matter cuts 3rd September 84 days after sowing and 20 days after Flexi-N application.
 # There was not enough bulk in the Margurita to do DM cuts.
 # FN = CSBP's Flexi-N

Species	t/ha DM
Tetila Ryegrass 100 FN	6.73
Tetila Ryegrass 200 FN	7.30
Margurita Serradella Nil FN	3.58
RM 4 Vetch Nil FN	4.92

Table 2: Dry matter cuts 13th October, 124 days post seeding and 40 days post Flexi-N application.
**Dictator 2 was not included in this round of DM cuts because it had got to soft dough stage.*

Summary and Conclusions:

1. Brassica's, serradella's and to a lesser degree vetch all like to be sown early, preferably on moisture when growing condition's are warm.
2. If you miss the early seeding with serradella's and vetch's, they will still perform, but fire up in the spring.
3. Ryegrass, the curse of the croppers, but it can grow some feed.
4. Add water and add N.
5. Gibberilic acid (ProGibb) is a cheap plant growth regulator to stimulate grass dominant pastures during the winter.
6. If wanting a cheap quick feed, consider oats+ryegrass or barley+ryegrass mixes.
7. We can have "our cake and eat it too" when it comes to grazing cereals and then taking them onto grain. Varieties for example Illabo wheat, Urambie and Planet barley's are getting mileage.
8. What about a forage barley for rapid early feed?
9. The 200 Lt/ha Flexi-N was applied for ease of managing the trial. However,"in the real world" two shots of Flexi-N @ 100 Lt/ha applied after each grazing is a more productive strategy.

Wayne Lewis standing in the trial site 13th October. Serradella foreground, followed by vetch, ryegrass and Dictator 2 forage barley.

Wrap Up: ASHEEP Spring Field Day 2020

Anita Chalmer, ASHEEP Project Officer

Scott Wandel at Glen Valley in Dalyup has been utilising existing feedlot infrastructure to improve calving outcomes and pasture establishment. The feedlot facilities are used for finishing steers over summer to March then lay empty until the next spring. In recent years a dry April, May and June have been problematic for cattle producers who calve in these months. Putting cows onto a silage and grain ration in a small paddock to calve and then onto a feedlot pen has improved calving performance and establishment of pastures. Silage is grown on farm and stored in bunkers next to the feedlot. The silage is a mix of Southwest pasture mix or oats and vetch. The feedlot ration is mainly silage mixed with seconds barley, straw and minerals.

Above: Robbie Johnson talks the group through the confinement system at Glen Valley.
Below: Long Season Wheat Trial with of Nurtien Ag Solutions Esperance.

Wandels have used fixed-time AI in their heifers. A concentrated calving means calving dates are predictable and that late gestational nutrition can be better managed. Falling pregnant to AI or to a backup bull on the first cycle after AI also means heifers have a longer period of time to raise a calf and get back in shape and cycling before the bull is back in. Silage is fed to heifers along fence lines in a small paddock to background them and acclimatise them to being fed and handled prior to calving. Grain is added to the ration and minerals fed to ensure they are getting a balanced ration.

Bronwyn Fowler from Nutrien Ag Solutions discussed the importance of preparing cows for calving and some of the difficulties faced in a confinement feeding situation which can be remedied by testing feed and balancing the ration before the cows go on to feed.

Ellie Bigwood representing AWI introduced herself to attendees as a point of communication between farmers and AWI and is available for feedback at any time if you have an issue which needs attention.

Rohan Marold hosted a trial run by Nurtien Ag Solutions Esperance examining long season wheat varieties grazed and ungrazed and the performance in Esperance zone. Agronomist Dan Bell took us through the trial. There were a variety of phenotypes and maturities with promising data coming from biomass cuts. Full results will be available in the near future.

Leigh and Karina West of Karleigh Farms sowed a spectacular paddock of vetch which had been sown and grazed by 7.3DSE/ha of twin bearing ewes during lambing and then 15DSE/ha weaned lambs and will be cut for hay with some set aside to harvest for seed. The Wests are very impressed with the performance of vetch as a legume break in the cropping program and a useful feed source in a challenging winter. The sheep found the vetch slightly unpalatable and were observed to preferentially graze any weeds. The vetch grew rapidly and out-competed weeds which in September looked like a very clean stand.

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Ron Yates and Rob Harrison from the Centre of Rhizobium studies informed the group about the International Legume Inoculant Genebank at which was formed thanks to a $1.55 million investment from GRDC at Murdoch University designed to preserve the 16,500 strains of rhizobia collected since the 1950s in a secure facility for future research. Ron and Rob also gave an update on current research and interesting projects which are in the pipeline including an acid tolerant vetch rhizobia.

On to the Whitings at Gibson where Planet Barley was sown as a grazing crop and has provided an estimated $325/ha of grazing value while allowing pasture paddocks to establish over winter. Illabo wheat was also grazed and provided a whopping 2.9t DM/ha and is growing into an impressive grain crop.

Above: Ron Yates & Rob Harrison of the Dryland Pasture Legume Systems project gave a talk at the West's. The tour bus was hosted and sponsored by WALRC's Tim Watts.
Below: Discussion on the pros and cons of mulesed and non-mulsed flocks at the West's.

Above: Brett Whitings speaks in a paddock of Grazer Oats.
Below: Grazed Illabo Wheat at the Whiting's.

Above: Planet Barley at the Whiting's.
Below: Floyd Sullivan, Alosca, crowns John Wallace the Nod King for 2020.

The evening concluded at Lucky Bay Brewery where the 2020 Nod King John Wallace was crowned and won 500kg of ALOSCA. Congratulations King Wal! Woodfired pizzas sponsored by Rabobank were well received and washed down with beverages sponsored by Alosca, Zoetis, Farm and General, ANZ and Coopers.

Overall, a well attended and thought provoking field day, aided by many discussions led by the bus host Tim Watts from WALRC.

Improving Reproductive Performance with Regulin

Bronwen Fowler, Nutrien Ag Solutions

Sheep are seasonal breeders, as the days get shorter and nights longer during autumn, ewes and rams naturally come into their peak reproductive performance. As night length increases, increasing levels of melatonin signal the ewe's reproductive system to increase activity reaching a natural peak in Autumn. The longer days of spring/summer are less productive than autumn joinings because there's reduced fertility and lower lambing rates due to a lower melatonin level in the animal. As seen in Figure 1.

Historically growers chasing early markets and joining outside of the ideal joining period, have used many different management practices, to maximise conception rates. Regulin is another tool growers can utilise in Merino, Dorper, First Cross, Poll Dorset, Border Leister &/ or Texel breeds, to improve reproductive performance in spring/ early summer joining. As shown in figure 2. Regulin is a small pellet implanted under the skin behind a sheep's ear. It releases melatonin, which is naturally produced by all animals, over 100-120 days. Regulin is designed to improve joining performance, assist animals in reaching their genetic reproduction potential and increase ovulation rates in sheep, by mimicking the onset of Autumn, the natural season for joining sheep. Each implant contains 18mg of melatonin, a substance which is naturally produced by the sheep's pineal gland, at night.

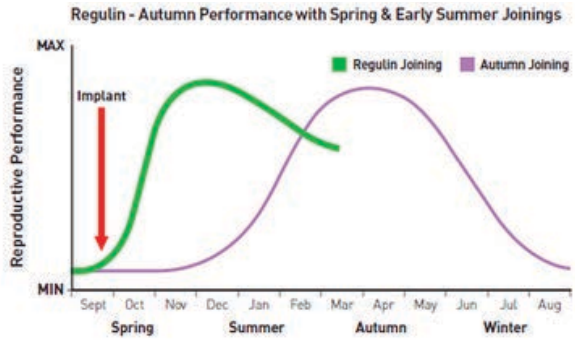

Figure 1. Reproductive Performance
Source: Ceva, 2020

Regulin moves the reproductive peak of autumn forward, in ewes, by inducing sexual readiness in spring and early summer, allowing year-round productivity and in rams, Regulin increases the amount of sperm in each ejaculate, increasing the chance of conception.

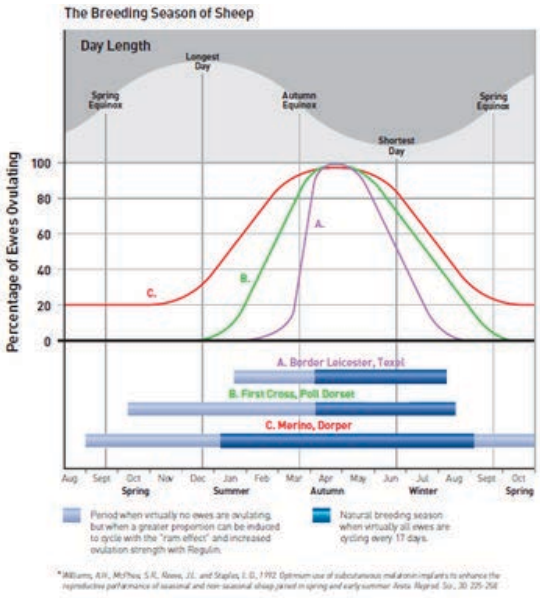

Figure 2. Breed Seasonality & Regulin.
Source: Ceva, 2020

Regulin offers many benefits for producers other than extra lambs on the ground, which is calculated in the simple ready reckoner table in Figure 3. Showing an increase of return on investment of + 20%, when animals are in good condition and joined in spring or summer . The other benefits which provide significant flexibility and flock improvement are:

- Fully maximise the genetic potential of your sheep
- Reduce joining times - compress lambing periods by triggering ewes to cycle
- Reaches the full potential of rams - year round
- More even line of lambs, at marking & for sale
- Suited to all enterprises, stud, wool and prime lamb producers· Increased fertility in early joining, can be used in AI program for ewes and rams
- More productivity and income per ewe mated, due to less dry sheep & increase in twins
- Greater market flexibility reach earlier markets
- Can see an increase in lambing percentage of up to 20 % with an increase of only 4.5 % required to give, a positive ROI

Figure 4. Return on Investment with Regulin. Source: Ceva, 2020. Advice is a general estimate of expected returns if sheep in good condition are joined Spring / Summer. We provide a detailed plan to customers prior to use.

Key to Success With Regulin:
It is important to remember that Regulin is not a silver bullet, it will not replace good husbandry techniques in achieving good reproductive performance, it requires animals to be in healthy condition for good results.

- Measurements – important to scan for litter size to measure and analyse against historical data & success of Regulin
- Carry out ram health checks & animal health treatments- min 8 weeks from joining
- Avoid heat stress or shearing rams within 8 weeks of mating· Implant 40 days pre- joining- to achieve maximum results
- Essential to isolate ewes and rams 40 days pre-joining- keep 1 km away for at least 40 days pre-joining
- Address mineral deficiencies- Important to prevent mineral deficiencies Zn, Se, Mn, Cu, Co & P which affect reproductive performance
- Use in only reproductively mature sheep that have reached at least 75 % of mature BW

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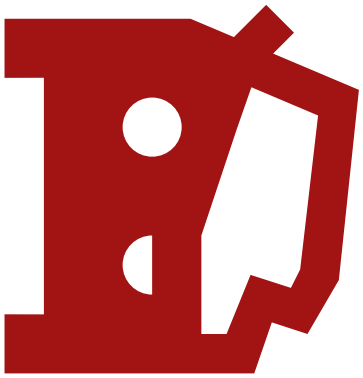
- Use rams at 2 %
- Join maiden ewes separate to older ewes
- Avoid mating maiden ewes in full wool
- Ensure all other animal health treatments / internal / external parasite control is completed before joining
- BCS 3- sheep must be in a rising plan of nutrition or of BCS 3 to ensure adequate reproductive performance
- Avoid stress/ unnecessary handling within 40 days after joining- to prevent early embryonic losses
- Feeding Ewes to Physiological Requirements- to maximise lambs on the ground ensuring nutritional requirements are met through pregnancy and lactation.
- Manage Mob sizes – Twins (<150) and singles getting the right mob size is crucial for lamb survival, particularly with tighter lambing period and increased potential ewe lamb interactions

This information is of a general nature and should not be considered a substitute for reproductive advice that considers your individual circumstances, which should be obtained from qualified personnel. To the extent permitted by law, Nutrien excludes all liability to any person arising directly or indirectly from use of the information contained within, including but not limited to information that is used incorrectly or which is out of date."

Animal Transport Accidents

Mandy Curnow, Department of Primary Industries and Regional Development (DPIRD)

Following on from a recent accident that occurred locally where a truck transporting sheep tipped over in high winds, ASHEEP would like to thank Mandy Curnow for providing the following points regarding the processes involved in such incidents from DPIRD's perspective.



- WAPOL (Commissioner of Police) are the Hazard Management Agency with control of transport accident scenes involving animals.
- Rescue of people and scene management including safety is the first consideration before rescue of animals.
- Following request from WAPOL, other government agencies like DPIRD will provide support during traffic accidents involving livestock. Humane destruction of animals by inspectors from WAPOL, DPIRD, RSPCA, or DBCA, or a private veterinarians or a competent person occurs on site when it is believed an animal is suffering so severely that destroying it would be a humane thing to do.
- Straying animals are mustered to prevent injury, loss and traffic accidents. These animals can be temporarily held on roadsides or private land with the permission of the owner.
- Transport and management of remaining animals is the responsibility of the animal owner. Livestock must be assessed as fit to transport. When in doubt, a veterinarian must be consulted and then only transport under veterinary advice.
- A veterinarian may advise the remaining livestock are monitored and spelled for a period before transport. These animals will need access to adequate feed and water.
- Biosecurity issues for livestock once relocated should be considered by the owner. Lice and footrot status are the key issues. It is unlikely that weeds or worms would be translocated in an incident of this kind.

Livestock ASSIST provide a 24 hour hotline and a network of local contacts with expertise and equipment needed to recover stock from a vehicle, round up escaped animals and provide veterinary services information. Find out more at: https://alrta.org.au/animal-welfare-2/livestockassist/

Meat Market Report: A green future for red meat supply chains

Angus Gidley-Baird, Senior Animal Proteins Analyst, Rabobank

The red meat sector has been the focus of attention for a while with the growing societal concern on reducing greenhouse gas (GHG) emissions. In addressing this concern we feel it will be the market – rather than regulators – that will drive change in the sector.

While change presents challenges, the trend towards climate-friendly meat will also offer opportunity for meat industry players, including those in Australia.

A challenge for the red meat supply chain lies in bringing the two ends of the supply chain together. In the red meat supply chain, the bulk of the emissions occur at the production end of the supply chain, yet it is society – in this case consumers – that represent one of the key proponents for emissions reductions (see Figure 1).

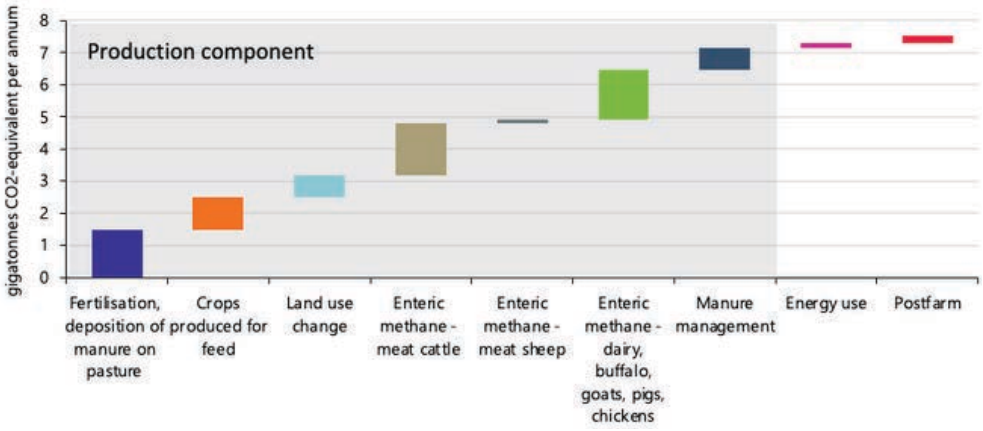


Figure 1 Global emissions from livestock supply chains by category of emissions, 2020

Communicating emission reductions through the supply chain is essential to connect the two ends of the supply chain, and requires either the use of a trusted program or brand, or the measurement and reporting of emissions.

However measuring livestock GHG emissions in a broad scale approach is, perhaps, the greatest challenge the industry faces. The diversity of operations and production systems, the interactivity with the landscape, the whole of life-cycle consideration, lack of data and harmonisation of methodologies all complicate the measurement process. Without the ability to easily, accurately and consistently measure emissions, it makes it difficult for broad based policy instruments to be applied, and why we believe a market-based approach is more likely to lead change.

Dedicated supply chains to facilitate change

We believe the use of tailored programs with certain specifications in dedicated supply chains – similar to current grass-fed and organic programs – will allow stakeholders to produce lower-emission red meat without necessarily undertaking onerous emission measurements.

Instead of having to measure on-farm emissions, livestock owners could participate in adedicated supply chain with a program that uses a technology or process that has demonstrated emission benefits. Some of these technologies, such as using methane-reducing feed supplements, implementation of emission-reducing farming practices or refined genetics, are already being commercially applied, and it was only a matter of time before they are integrated into dedicated supply chains.

Incentives for change

The market-based approach we expect to shift the industry towards reduced GHG emissions requires incentives to help stimulate change. Price premiums for producers are an obvious incentive. However, we believe price premiums for low-GHG emission beef will be limited.

While sustainability ranks highly amongst a growing number of consumers, they don't necessarily want to pay higher prices for the benefit. Surveys conducted by Meat & Livestock Australia show that, when it comes to the actual purchase, the most common drivers for protein choice are freshness, value, and ease of preparation. Furthermore, the socialisation of the benefits make it less attractive for the consumer to wear the full cost.

Despite the potential lack of price premium there is still significant value that can be captured in the low emissions red meat supply chain, including opportunities for productivity gains, generation of carbon credits, plus access to markets and capital.

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The timeline is short

While a number of proactive governments around the world have begun regulating to reduce emissions in the red meat industry, most have set a 2030 target for change through commitments under the Paris Agreement. But the market-based approach will see changes implemented faster, and it is entirely possible that supply chains could implement changes in the next two to three years.

Big names in the red meat industry from supermarkets and quick service restaurants to processors and industry bodies have announced policy positions and are in the process of implementing programs.

While it may be confronting, we must understand that these stakeholders are positioning themselves to retain or grow consumer trust and ensure the market for red meat is retained. Through the development of a market based solution it should allow flexibility for all stakeholders in the supply chain to choose the avenue that best suits them in terms of costs and benefits.

2020 – A story that could not be written.

Ross Major, Ballard Seeds, ASHEEP Bronze Sponsor

The year started with much of Australia on fire during our hottest and driest summer on record. Before the smoke had a chance to dissipate fully, COVID 19 became a reality. As when man landed on the moon, I believe COVID will be a marker in time. The drought broke rather dramatically on the eastern seaboard, regenerating the parched and scorched landscape. As this year draws to an end, we find that we are moving into La-Nina again. There is one common thread in all of this – Western Australia is a wonderful place to live. We have and will be impacted by most of these events, but through good management (and a little luck) the impact felt in our part of the world has not been as severe.

As a general rule, La-Nina brings milder temperatures, less frost risk, more cyclones and an increased chance of rainfall, both winter and summer. Coupled with the loss of pasture quality being a consequence of the end of season rainfall, planting a summer forage crop this year may well be worthwhile. We currently have good stocks of Forage Sorghums, Millets, Sunflower, Brassica's, Chicory and Buckwheat.

Supply for the autumn sowing pastures is being complicated by a less than ideal 2020 growing season as well as this wet start to harvest. The good news is that pricing has fallen on our generic ryegrasses, also there are some exciting new varieties available.

Frano Pink Serradella

A short season, hard seeded French Serradella that shows great early vigour.

Lebeccia

Although officially released last year, it is hoped that seed for this sand loving shrub will be commercially available for 2021.

Please feel free to give us a call on 98815711 if you have any queries pasture related, be it sourcing seed or agronomic advice.

Market Report: Wool

Danny Burkett, Auctioneer/Key Account Manager, Westcoast Wools

The wool market continues to show resilience in light of world events due to the coronavirus, with two of our staple markets India and Italy being virtually non existence in the market. This has left China to dominate and dominate they have on the back of domestic consumption of Merino wool. Mills are still running at below optimum efficiency however they are operating and feeding this internal market. What has helped have been the Australian government and industry imposed restrictions on the operating times of the Melbourne selling centre, the government reduced the amount of trading days from three to two and then industry imposed lot restrictions on the remaining two days. This has limited the flow of wool onto the market restricting the amount of 45 000 bale sales nationally, which in the main a sale of this quantity over the previous five years has had a dampening effect. This is of note as there are still approx. 240 000 bales on hold in brokers stores in addition to the wool held on farm that we can't measure. If this starts to come onto the market January onwards 45 000 bale sales could be the norm. At the time of writing 17th Nov 2020 the government has removed its trading restrictions, with this in mind the industry meets 27th Nov to discuss its position, will the industry forge ahead with its own measures or will it follow the governments led.

Putting the 19 and 21 indictors or fleece price in perspective since 2013 through to today *excluding the extreme run in prices from mid 2017 through to Feb 2020* a 19 micron sits at the 50% decile meaning it has traded 50% above and 50% below todays price and the 21 sits at the 30% decile meaning it has spent 70% of the time above todays price. These figures are important as it gives a view through the upcoming window into how we may see the different microns react going into the next six months. The AWTA (the body responsible for testing the Australian wool clip) show the Australian wool clip broadening due to seasonal conditions in the East, this trend in all likely hood will continue so production of finer wools will slow. I feel the market is reflecting this at present with the spread in price between 18 and 21 micron moving from under a dollar three months ago to be 355 cents today. This spread historically can reach 500 cents and you could argue quite strongly that this could be achieved again.

With volatility running at a measure of 42%, meaning extreme, it has been difficult to pick a sound and founded market as it still struggles to find a trading range. So at this stage we have seen offerings around 35 000 bales produce a dearer market, 40 000 bales produce a firm market and 45 000 bales produce a cheaper market. These lower volume sales could be harder to find as we move into the second half of the selling season, it is around anticipation, if trading operates as it has over the last few months, get wool into sales with lower offerings and cross your fingers.

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"Keeping the Bucket Balanced"

Bronwen Fowler, for Clarke & Stokes Agriservices

As we are all acutely aware, for optimum growth, production and reproduction, ruminants must receive a diet that has adequate: metabolisable energy, amino acids / protein, minerals, vitamins and clean fresh water, to suit the production status of the animal. A deficiency in any of these, can cause production losses due to poor growth rates, ill health, increased parasite challenges or disease.

Some nutrients are more limiting to production than others as seen in figure 1. How do we know what to supplement, particularly on stubbles? To start with it is important to fix those at the top (energy and protein), and then move down the list, aligning to the production status and physiological needs of the livestock.

As a pasture / stubble quality is poor, with low protein and low energy values, providing energy and protein supplementation is crucial. With this then comes extra challenges of balancing the ration to ensure that all key 17 essential minerals requirements are being met.

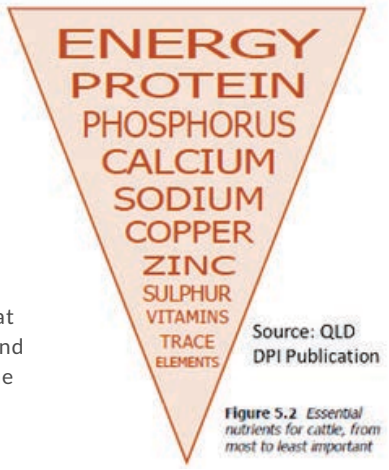

Figure 1. Essential Nutrients for Cattle

Of the 17 essential minerals proven to be important for animal metabolism the ones most likely to affect production of grazing livestock include the major elements Ca, P, Mg, Na and S and the trace elements Co, Cu, I, Mn, Se and Zn. The mineral requirements of livestock will vary with their age, weight, health and level of production. Generally though, young, rapidly growing animals in the Esperance region are the most susceptible to trace element deficiencies, in particular Se , Zn, Co & Cu . Sheep are more susceptible to Se and Co deficiency and slightly less susceptible to Cu deficiency than cattle. Late pregnancy and lactating animals, and animals on high grain diets are more susceptible to Ca deficiencies.

	Cattle	Sheep
Macrominerals	**g/kg**	**g/kg**
Calcium	3.5	3.0
Phosphorus	3.0	2.0
Sodium	1.5	1.0
Chlorine	2.0	1.0
Potassium	5.0	4.5
Sulfur	1.5	2.0
Magnesium	1.5	1.0
Trace elements	**mg/kg**	**mg/kg**
Iron	40	40
Zinc	25	20
Manganese	25	25
Copper[2]	5 to 12	5
Cobalt	0.10	0.10
Iodine	0.50	0.50
Molybdenum	0.10	0.10
Selenium	0.05	0.05

[1] Based on data presented by the ARC (1980), Grace (1983), NRC (1978), Underwood (1981) these amounts represent the average requirements for growth, pregnancy or lactation, in grazing livestock.
[2] Copper requirements are strongly affected by the concentrations of molybdenum, sulphur and iron.

Figure 2. Essential Minerals for Livestock
Source: Victorian Resources Online, DEPI Victoria

So how do we determine which minerals to supplement, when livestock have access to adequate levels of dietary energy and protein? As signs of marginal mineral deficiencies often can go unnoticed and can be caused by mineral interactions or associated with other animal health disorders such as internal parasites or stress, it is important to measure mineral status.

First, we need to measure mineral status of the livestock and the dietary sources of minerals available to livestock, the bioavailability of these mineral sources and the possible mineral- mineral interactions. Having water, fodder, soil, plant tissues, liver biopsies and/or blood tests completed to get a snapshot of the mineral status of the livestock and the fodder sources available is an important process to assist in determining a mineral supplementation program. Testing water in dry seasons is important as even though the majority of minerals comes from feed sources, nutrient imbalances may occur, due to the higher concentrate of minerals in water sources.

Figure 3. Mineral Interactions

High intake	Induce Deficiency
K	Mg
RDP (Rumen Degradable Protein)	Mg
Ca	Mg
Mo & S	Cu
Fe & S	Cu
Zn & Fe	Cu
Cu & S	Mo
Ca, Se, Cu and Cadium	Zn
P	Ca
Ca, P & Fe	Mn
S	Vitamin B1
Low intake	**Induce Deficiency**
Se	Iodine
Vitamin D	Ca & P

Mineral deficiencies occur not only due to insufficient minerals in the diet, but also due to low absorption from poor bioavailability and due to mineral interactions. Some of the mineral interactions which can occur and induce mineral deficiencies are shown in the table below in Figure 3. Se & S are similar chemically potentially compete for uptake and utilisation in animals. Vitamin D must be metabolized from food (cholecalciferol) & sunshine (7 -dehydrocholesterol) in the kidneys to 1, 25-Dihydroxycholecalciferol for function, to stimulate intestinal Ca & P absorption.

When feeding wheat, barley, oats etc it is vital that Ca, supplementation is supplied to maintain the Ca:P ratio. Figure 4 shows large imbalances of Ca: P in cereal grains. Increasing the dietary Ca supply to maintain a balance of 2:1 Ca:P, will be important, but can decrease the absorption of Mg and other minerals, so when providing Ca supplementation, it is important to supplement other minerals to maintain the mineral balance.

Mineral Supplementation methods vary in efficiency and have their individual benefits but must be assessed on their own merit, against the mineral requirements of the stock class, the bioavailability, the risk of toxicity (main risks Se & Cu) and supplementation efficiencies.

For further information, fodder /water testing, or for advice on best for mineral supplementation options for your enterprise please consult your local Clarke and Stokes store.

CLARKE & STOKES AGRISERVICES
A NUTRIEN AG SOLUTIONS PARTNER

References: Victorian Resources Online http://vro.dpi.vic.gov.au/dpi/vro/vrosite.nsf/pages/trace_elem ents_pasture1

Case Study: Katanka Farms - Demonstrating the value of integrating Fixed Time AI (FTAI) into commercial heifer mating programs.

Dr. Enoch Bergman DVM, Swans Veterinary Service & Member of the ASHEEP Cattle Committee

Katanka Farms is owned by South African farmer, Mr. Alfie Wagner. Alfie agreed to participate in the ASHEEP/Swans Veterinary Services, Meat & Livestock Australia (MLA) Producer Demonstration Site (PDS) focused on demonstrating the value of integrating FTAI into commercial heifer mating programs. The goal of the PDS was to demonstrate the ability of integrating FTAI in heifer mating programs to improve conception rates, reduce dystocia, reduce calf mortality, reduce heifer mortality, improve calf weaning weights and improve heifer rebreeding rates. The project was secondarily designed to emphasize the value of both ensuring adequate heifer premating weights and of condensing the calving pattern of first-time calving heifers.

Alfie's Australian holdings were managed by Ryan Willing and his wife Elisha until December 2019. Ryan is a current board member of ASHEEP and a member of the cattle subcommittee involved in the project. Alfie farms 2100 hectares in the Condingup region, predominately running 700 breeders. Katanka participated in all three years of the trial. Ryan didn't hesitate to participate in the PDS on Alfie's behalf. "I was very excited to be involved with this PDS, I've long thought that artificially inseminating heifers was the next step forward in commercial beef cattle enterprises so this way a great opportunity to prove that." Ryan said. "Heifers represent your farm's best genetics so lets get the best calf out of them we can and set them up to improve their rebreeding rate." He added.

The setup of the PDS was fairly simple. Ryan randomly hi-jacked approximately half of Alfie's replacement heifers, synchronized them, and Dr. Enoch Bergman of Swans Veterinary Services inseminated them on the first day of their traditional mating season. The remaining half of the heifers were put straight out with appropriate bulls on the same date. The heifers which were enrolled in the AI program joined their naturally mated siblings ten days later for the remainder of the planned heifer mating period. The conception rate, calving success, rebreeding rates, and the weaning weights of calves from the two groups of heifers were measured in order to estimate the potential value of integrating FTAI into Alfie's commercial heifer mating programs. Heifers from 10 other Esperance properties were involved in the trial. Some properties, like Alfie's, participated for all three years.

Under Ryan's management, Alfie's FTAI integrated heifers had a lower conception rate than their naturally mated siblings in the first year of the program, but enjoyed a superior conception rate in the second and third years. One of the objectives of the PDS was to highlight the importance of achieving adequate premating weight and recognition of the need to ensure a positive plane of nutrition through the mating program. Ryan said. "To ensure the best return on investment when integrating FTAI in your heifer mating program, nutrition is essential. Having all heifers at 55- 60% of mature cow weight and on a rising plain is the best way to get a higher conception to AI in my experience."

Overall, the conception rate was 0.4% better for the heifers which were naturally mated. From the 15 replicates over the entire PDS the conception rate was 0.8% better on average for the heifers enrolled in the FTAI program. The statistics are summarized below.

	FTAI Integrated			Naturally Mated			
	Preg Tested	Empty	% Empty	Preg Tested	Empty	% Empty	% Difference
Year One	102	11	10.8%	102	8	7.8%	2.9%
Year Two	85	14	16.5%	86	16	18.6%	-2.1%
Year Three	118	25	21.2%	99	22	22.2%	-1.0%
Average	305	50	16.4%	287	46	16.0%	0.4%
All Farms	1207	209	17.3%	1240	225	18.1%	-0.8%

Once calving commenced, the heifers which conceived to the AI program calved well in advance of most of the naturally mated heifers. In fact, over the complete PDS data set, 63.8% of the heifers in the FTAI Integrated group had calved by the scheduled calving start date vs. 21.6% among the naturally mated heifers, mostly due to the inherent value of synchronization but also due to selection of AI sires with short gestational lengths, coupled with calving ease and sold growth EBV's.

The advantages afforded by a higher proportion of the pregnancies being sired from proven bulls was relatively evident once the dystocia (or calving trouble) statistics were compiled, demonstrating a reduction of 33% in dystocia, 56% in calf mortalities, and 100% in heifer mortalities associated with calving averaged over the three years. The statistics, including those from all of the producer demonstration sites over the tree years are summarized below.

	FTAI Integrated							Naturally Mated							Differences		
	Calvings	Dystocia	% Dystocia	Calf Death	% Calf Death	Heifer Death	% Heifer Death	Calvings	Dystocia	% Dystocia	Calf Death	% Calf Death	Heifer Death	% Heifer Death	% Difference Dystocia	% Difference Calf Death	% Difference Heifer Death
Year One	89	5	5.6%	4	4.5%	0	0.0%	88	4	4.5%	6	6.7%	1	1.1%	1.1%	-2.2%	-1.1%
Year Two	73	4	5.5%	2	2.7%	0	0.0%	70	6	8.6%	4	5.5%	0	0.0%	-3.1%	-2.7%	0.0%
Year Three	76	3	3.9%	1	1.3%	0	0.0%	55	6	10.9%	6	7.9%	4	5.3%	-7.0%	-6.6%	-5.3%
Average	238	12	5.0%	7	2.9%	0	0.0%	213	16	7.5%	16	6.7%	5	2.1%	-2.5%	-3.8%	-2.1%
All Farms	880	51	5.8%	25	2.8%	3	0.3%	849	63	7.4%	47	5.3%	11	1.3%	-1.6%	-2.5%	-0.9%

The rebreeding statistics were collected from each farm in the PDS. Alfie's heifers, which had been enrolled in the FTAI program as heifers, enjoyed a significant improvement in subsequent conception rate after delivering their first calves. Those from within the group which had been AI'd had 56% fewer empties at rebreeding.

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A similar advantage was observed in 8 of the 10 sites over the first two years of the program. Data is still being collected from the animals enrolled in the third year. The apparent advantage is believed to primarily be driven by the higher proportion of heifers calving earlier in the calving season within the FTAI Integrated groups. It is well established that in most instances, heifers which calve early tend to have higher subsequent conception rates. Combining the value of synchrony and the use of short gestational AI sires, the heifers enrolled in the FTAI Integrated groups calved over 8 days earlier on average than their siblings. Alfie's rebreeding data, is summarized below.

	FTAI Integrated			Naturally Mated			
	Preg Tested	Empty	% Empty	Preg Tested	Empty	% Empty	% Difference
Year One	86	6	7.0%	83	7	8.4%	-1.5%
Year Two	70	3	4.3%	54	11	20.4%	-16.1%
Average	156	9	5.8%	137	18	13.1%	-7.4%
All Farms	592	63	10.6%	600	86	14.3%	-3.7%

The value of synchrony extended beyond rebreeding, as the weaners from the FTAI Integrated heifers were consistently heavier than those from the naturally mated group at Katanka. The calves born from the FTAI Integrated group from the first year of the program were only 6 kilograms heavier, however, they were a whopping 20.6 kilograms heavier in the second year, for an average of 13.3 kilograms.

Ryan commented, "Katanka's heifer calves already typically weaned 10kg heavier than the rest of the farm but to improve that by another 13kg was huge." The findings at Katanka aligned well with the average from all other farms reporting weaning weight data, which averaged out to a 13.1 kilogram advantage.

In consultation with Esperance producers both participating and observing the PDS, some economics were applied to the findings of the PDS. Having accounted for all of the AI mating costs to each cooperating producer for semen, pharmaceuticals, technician time, and travel, the average cost to each producer would have been $24.99 more to AI and back up at 2% bulls than to naturally join all of their heifers to bulls at 3%. Alfie's calculated FTAI integration costs, due to his distance from town, were $31.44 extra per pregnancy to integrate AI over his entire budgeted heifer population. At full cost, Alfie's AI program cost him $56.27 per head AI'd. Producer labour was estimated at 40 hours at $30 per hour per 100 heifers AI'd over the course of the average AI program. However, Ryan noted, "The other major cost saving was the labour saved calving the AI group. Whilst constant checking is still required, having tighter calving windows turned a 7 week job into a 4-5 week job plus with less heifer intervention required from the calves conceived to AI."

Pregnant heifers were valued at an additional $100 per animal compared to empty heifers diagnosed at preg test. Dystocia events were estimated to average $200 in labour and/or veterinary costs per case. Deceased calves were valued at $500 and deceased heifers at the point of calving at $2000. Kilograms of calf weaned were valued at $4.00 per kilogram live weight. Lastly, empty 2nd calvers were devalued by $1000 per animal should they be empty at their second pregnancy test.

The mathematics for Alfie stack up quite neatly as can be seen from the worksheet below which shows the financial benefits captured within one year of the intervention, primarily driven by heavier weaners and better pregnancy rates at the heifers' second mating opportunity.

	FTAI Integrated	Syndicate	Difference	Potential Value	Totals
Average Mating Cost	$132.85	$101.41	($31.44)	($31.44)	($31.44)
Labour Costs in Man Hours Per 100 Head AI'd	40 Hours	0.00	($40.00)	$30.00/hr	($12.00)
Heifer Empty Rate	16.40%	16.00%	-0.40%	$100.00	($0.40)
Dystocia Events	5.00%	7.50%	2.50%	$200.00	$5.00
Calf Mortality	2.90%	6.70%	3.80%	$500.00	$19.00
Heifer Mortality	0.00%	2.10%	2.10%	$2,000.00	$42.00
Weaning Weights of Calves (Averge over 2 Years)	324.3 Kg	311.0 Kg	13.3 Kg	$4.00	$53.20
Rebreeding Empty Rate (1st Calvers)	5.80%	13.10%	7.30%	$1,000.00	$73.00
Profit Returned to Alfie Per Heifer Pregnant in AI Group Not Including Genetic Improvement:					$148.36

"I also noticed that a higher percentage of the heifer's heifer calves were ending up selected as replacements from the FTAI integrated group which would rapidly decrease the time taken for genetic improvement within the herd." Ryan said, adding "After participating in the trial and proving the benefits of FTAI in heifers, Katanka now AI all their heifers even under new management. I also continue to do the same with my own heifers and will never look back."

The Fixed Time AI project is run by Swans Veterinary Services in conjunction with ASHEEP, through the Meat & Livestock Australia Producer Demonstration Site program.

asheep Esperance

Swans Veterinary Services

mla MEAT & LIVESTOCK AUSTRALIA

Ramping up Repro: Summary of the RAMping up Repro day at the Vandenberghe family's property

In October, ASHEEP teamed up with AWI, The Sheep's Back and Zoetis to bring "RAMping up Repro" to Esperance - a well-received half day course focused around improving ram management to increase production. Following is a wrap up of the course from Zoetis's Ben Fletcher.

A big thanks to Dave and family for hosting, and the ASHEEP group for facilitating the invite push out - it is much appreciated. David Swan from Swans Vet did a fantastic job presenting on the day, keeping it simple and concise. And to my colleague Jarvis who masterfully, on the day was the Chief Ram Dragger.

It was a great day with some very important messages to get out to the commercial breeder regarding ram health and the flow on effect of a breeding operation's productivity.

RAMping Up Repro is a hands-on workshop focussed on improving ram performance and working longevity in your sheep breeding enterprise. This workshop is designed to upskill producers across the key components of ram performance including:

- Anatomy
- Physiology
- Spermatogenesis
- Metabolic demands
- Health, disease & biosecurity
- Financial impact of the ram team

Key themes

- The importance of optimum health in rams
- Pre-joining inspections, management and animal health factors affecting ram performance
- What drives joining performance
- How best practice ram management impacts on overall reproductive performance of your flock
- Calculating the true cost of a ram, and how your purchasing decisions give pay back

David Swan talking through the delicate art of extracting the pizzle from the prepuce to examine the urethral process.

The intended outcomes for producers are:

- Identification of anatomical structures and knowledge of physiology directly impacting on the ability of that ram to serve and perform including the crucial 4 T's (Teeth, Toes, Testes, tackle)
- The ability to perform a thorough pre-joining ram inspection regarding critical structures and timing
- The principles and skill of Condition Scoring and its impact on ram team management
- A sound understanding of the animal health, disease and biosecurity considerations that need to be considered when managing a ram or ram team for a successful joining
- Correct vaccination technique to maximise animal and user safety and to minimise site reactions and associated complications
- The ability to calculate the economics of ram power and serving costs of a ram team
- An appreciation of the **genetic legacy of a ram over time, poor genetic decisions can have a significant impact on flock progeny for 16 years in a typical self-replacing flock. Producers should aim to buy good genetics and look after them** as per RUR guidelines

More information can be found within the below link:

https://www.wool.com/about-awi/media-releases/ramping-up-repro-workshop-enables-woolgrowers-to-best-manage-their-rams-pre-joining/?category=0&year=0&month=0&page=1

Message from Esperance Livestock Transport

John Mitchell, Esperance Livestock Transport

G'day A Sheep Members.

In this article I have a couple of things to mention, our operational developments and our customer relationships.

In relation to our operational development we have our cattle yards and scales under construction, these should be operational by Christmas. They are coming up well but have struck some headwinds with the supply of labour and some issues with the suppliers of the Cattle Scale.

Some of you would have noticed a different voice when contacting us over the past six weeks or so, that is me! We knew Jan Clawson has commitments with her own business that were always going to take her into harvest and effectively make her a part timer in 2021. Jan has been great and will always be a part of our Esperance Livestock Transport & Mitchell's Transport family.

I have been spending 10-12 days per fortnight in Esperance, commuting back to Waroona for urgent business and personal matters. It has been great to be inside the Esperance business, getting a handle on how we need to 'look' moving forward. This will continue for the foreseeable future; it will evolve into a more long-term model in the new year.

With that said, we are on the look out for people who can work for us in Esperance both casual and full time, from all-rounders to young folks who can work on a Saturday washing out crates. Just send me an email or give me a call if there is an interest.

On the customer relationship aspect, I think it is important that we have strong two-way relationships with our customers. It seems that there is sometimes some confusion as to who makes the choice on the carrier used to transport your livestock. The short answer is the person paying the freight has the choice to nominate their preferred carrier.

I have seen the confusion when I have asked the customer or the agent, sometimes both say, it is the other one's call.

Put simply, our goal is to be the first thought on every customer's mind by our demonstrated standards and our commitment to adding value to our customer's bottom line.

Thanks for your support and Merry Christmas from myself, Lisa, and our crew.

John Mitchell
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bookings@esperancelivestocktransport.com.au

Vet Spot: Down Cows - Calving Paralysis

Dr. Katie Kreutz BSc BVMS, Swans Veterinary Service

A common complication in cattle reproduction is when a cow is unable to stand on her own. This may occur prior to, during or after calving. Cows may go down and be unable to get up for hours or days. They may have repeated attempts at getting up with a few moments remaining standing before falling or laying back down again. This can happen for a number of reasons such as metabolic disturbances, calving paralysis, dystocia or infections. Some of these conditions can be difficult to differentiate from one another. However knowing that a cow had a difficult calving, especially if assistance and tough pulling were required, commonly precedes a calving paralysis. This can occur when an oversized calf is stuck in the pelvis during or after the calving process, or if assistance involved a hard pull. This is due to compression, lack of blood flow and inflammation of the nerves that innervate the hind legs. Cows will usually go down during or after the calving. The longer these cows stay down, the more time, effort and treatment is required to get them standing.

Treatment: An anti-inflammatory (12-15mL meloxicam under the skin) is the main component of treating calving paralysis. Antibiotics (50mL Alamycin LA) are also indicated especially in tough calvings or dystocias. If cows are down for several days using a steroid injection may be indicated as well. Ensure the animal has food and water available. Inappetence or low intake warrants oral drenching with glucose supplementation (Ceton liquid). Many of these cows will also benefit from 1-2 bags of Minbal 4 in 1 under the skin to provide extra glucose and improve calcium status. As cows can take hours to days to recover from calving paralysis it is important to keep the cow in a contained area she can't crawl on the ground and do more damage. Keeping her separated from other cows who may steal food and near a shed where she is easier to monitor is advisable. Deep soft bedding should be provided.

Hip Lifters: Swans Veterinary Services rents out a set of hip lifters for clients to use in conjunction with their front loader, fork lift or similar. These can be a valuable tool in well cows with nerve paralysis due to calving or prolonged periods of recumbency. Lifting the cow allows for better circulation to the legs and reduced inflammation of the nerves. The lifters should be placed over the hook (hip) bones and tightened to grip firmly. Lifting straps should be placed around the front legs as pictured below or under the chest to provide balance. Straps can be purchased at Farm & General. Cows should be lifted for 30 minute increments at least twice per day. The feet should just be able to touch the ground and some assistance to place feet correctly may be needed. It is not advised to suspend cows off the ground for long periods of time as damage to the hip bones may occur. Remove the clamps in between lifting to avoid pressure sores.

Swans Veterinary Services

Contact: **Dr. Katie Kreutz, 08 9071 5777, katie.k@swansvet.com**

Effective worm control in sheep this summer after recent rainfall

Danny Roberts, Veterinary Officer, DPRID

Many inland areas had low rainfall during October and with low soil moisture this resulted in rapid senescence of pasture. Properties throughout the southern agriculture region then received significant rainfall during the first two weeks of November. This has implications for the control of scour worms in weaned lambs and hoggets over summer and later in autumn.

Prolonged period with the right temperature and moisture for egg development will extend the time worm eggs in faecal pellets will hatch and develop into larvae. The infective worm larvae will persist on drying pasture longer this year particularly in paddocks with any green pasture in low lying areas.

Further rainfall during December would have a potential impact next autumn. Higher rates of larvae of brown stomach worm and black scour worm would survive the hot dry January to March period because they can remain in the faecal pellet for extended periods.

It is important that weaned lambs and hoggets get a fully effective (greater than 98% kill of adult worms) drench by the first week of December, ideally with a combination drench product. Any delay in the timing of the effective summer drench will affect young sheep going into summer. Drench onto crop stubble or a low worm-risk paddock with pasture that has dried off and not grazed for last 6 weeks.

Older sheep (ewes and weathers) should be monitored at this time of year to determine if a summer drench is required. Treatment of adult ewes with an effective combination drench product for control of scour worms is still recommended to occur during early April. This will reduce the worm resistance selection pressure on your flock.

Control of Barber's Pole worm in weaned lambs or hoggets is also achieved by drenching in early December particularly if the weaned lambs also had a drench at weaning. However, ewes rarely suffer from outbreaks of Barber's Pole worm during summer, but is hard to predict the risk for each property. This dilemma is faced by many flocks located within 60 km of the coast. If you had a past recent outbreak of Barber's pole worm in adult sheep during summer, check the worm egg counts in early December, so drenches can be confined to mobs that need it. Development of infective Barber's Pole larvae will continue to occur if more than 15mm of rainfall falls during December or if soil moisture remains high in a paddock. If this is the case in your flock and the property is located within 60 km of the coast, then give an effective drench in December to all ewes.

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GOVERNMENT OF WESTERN AUSTRALIA

Department of **Primary Industries and Regional Development**

ASHEEP / Swans Livestock Health Alert Group

Sarah Brown, Executive Officer, ASHEEP

ASHEEP has launched a Livestock Health Alert group on WhatsApp, in collaboration with the team at Swans Veterinary Services. It's open to ASHEEP members and our network of contacts to join.

The platform has been developed as a tool to assist sheep and cattle producers to be alerted to seasonal or regional livestock health issues and to improve responsiveness to potential biosecurity concerns.

The Swans livestock Vets (David, Nicole, Enoch, Katie, Reuben and Isabelle) are set up to post updates on current / seasonal health issues they are seeing or to request more information from farmers about particular issues that are cropping up. The ASHEEP Committee are also able to post alerts.

The WhatsApp group is a pilot project - we will review how it's operating in a couple of months. If you have feedback let us know. The idea was developed through the "Foot and Mouth Disease Ready" project that ASHEEP and Swans have been participating in.

How do you join?

Text Sarah Brown on 0409 335 194 with your first and last name and I will add you to the group or send you a link to join.

Thanks goes to the team at Swans for making this possible and for contributing their local knowledge and expertise.

Introducing DPIRD Biosecurity Officer Taneeke Marsden

Taneeke Marsden recently joined the Department of Primary Industries and Regional Development as a Biosecurity Officer. A graduate of Murdoch University with a Bachelor of Animal Science, Taneeke has a long-term interest in livestock health, having attended an agricultural college and worked on sheep and cattle farms in Western Australia and Canada.

Based in the Esperance office, Taneeke's role focusses on raising awareness about preventing biosecurity issues in livestock and ensuring compliance with biosecurity regulations across the Esperance and Ravensthorpe shires.

"My job is to help protect Western Australia's high biosecurity status so that our producers can continue to produce and market healthy livestock that are free of serious pests, diseases and harmful residues," Taneeke said.

"WA has strict livestock import protocols to prevent diseases from eastern Australia entering WA and part of my role is to ensure imported animals receive the follow-up treatment and testing in the Direction Notice they are given at the border."

Taneeke also works with producers whose flocks are diagnosed with virulent footrot.

"Biosecurity officers support producers to carry out an agreed property management plan to either eradicate or manage virulent footrot, as well as carrying out inspections to release the property from the Pest Control Notice once the disease has been eradicated. Eradicating footrot is hard work – part of my role is to remind producers of the importance of good biosecurity and isolating newly purchased sheep/goats to prevent spreading footrot onto their property." she said

Taneeke also carries out crucial audits to ensure stock feed for ruminants is free of restricted animal material (RAM). "I regularly examine animal feed arrangements at stock feed outlets and on producer's properties to make sure everyone is complying with the ban on feeding RAM to ruminants, which keeps Australia free from mad cow disease." Taneeke said.

RAM includes meat, manure or litter from pigs and poultry, organic fertilisers, animal meals, and feeds containing animal meal - such as pig feed, pet food (cat and dog) and poultry feed.

Taneeke can help local producers and stock feed suppliers with queries about feed labelling requirements, storing feed correctly to prevent cross contamination and making sure their ruminants can't access RAM.

Producers can also get help with questions about stock brands, correct livestock identification and complying with movement regulations from Taneeke.

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GOVERNMENT OF WESTERN AUSTRALIA

Department of
Primary Industries and Regional Development

ASHEEP South West Farm Tour

Sarah Brown, ASHEEP Executive Officer

In early September it was my pleasure to join a bus-load of farmers on a tour around the south west of WA. In true farmer fashion, we didn't quite make it as far into the south-west as the Margaret River wine region - in fact we got about as far west as Katanning before we found our way south towards Albany and then turned for home.

The tour was the idea of Mark and Liv Walter and was quickly endorsed by the ASHEEP Committee when put to a meeting. With so many great farms throughout the south-west region it was difficult to narrow down the list to fit into the handful of days we had. Still, the task was managed and we were very fortunate to have the opportunity to visit some exceptional producers.

Day 1: Esperance to Lake King

- ***ARKLE FARMS (JERDACUTTUP)***
- ***KARRADALE TRADING (LAKE KING)***

First stop on tour was to Arkle Farms, where we were due to meet Siobhan Solway (née Cowan) and manager Chad Hall. Arkle Farms was reasonably recently acquired by the Cowan family - Siobhan and her husband William moved out from the UK to operate the farm on behalf of them.

They hit the ground running bringing together a team of staff and transitioning the property from straight cropping back into a mixed enterprise with sheep and cattle. This was no mean feat and has involved an extensive overhaul of infrastructure and the introduction of new sheds, yards and many kilometres of fencing that did not exist after the property had been focused on cropping for so long.

All this has happened at a rapid pace to keep up with the arrival of stock - which included the purchase of the Cherylton stud breeding herd and the worm-resistant Rylington Merino research flock. The property has now been fenced with the intention that one person and a dog are able to move a flock of 5000 sheep around the property - laneways and centralised sets of yards are key to the design.

Tour Snapshot

Location: Esperance - Lake King - Katanning - Albany - Esperance

Dates: 8th - 11th September 2020

Travel: Bus

Organisers: Mark Walter (ASHEEP Chair) & Dave Vandenberghe (Vice), with Sarah Brown (EO) madly keeping track and forcing people back onto the bus after each stop.

Tour Guests: Rob & Marg Agnew, Deon & Belinda Lay, Richard Leske, Bob Reed, Simeon Roberts, David Vandenberghe, Mark & Liv Walter, Scott Welke.

With the clock ticking we dragged ourselves away (to the soon-familiar sound of me shouting "back on the bus!") and ventured over to our second stop for the day, Karradale Trading out of Lake King.

Craig and Anna-Lisa Newman own this mixed-farming enterprise and it was clear to see that they are keen to use technology to make their job easier. On arrival, Craig took us into a quirky house made from old beer bottles (assuring us that this was built well before his time) and took us through how he has been using his drone to count stock. Every mob that is trucked off has an ariel image taken prior to loading, and counted by Craig with the aid of a "Visual Counter" app. It takes Craig about 10 minutes to count a mob of 5000 sheep and the image is signed off by the trucker and sent to the buyer - keeping a visual record of numbers. The drone is also used to when moving sheep and for shearing counts.

Craig then took us around their lamb auto-feeder system, on which they raised about 60 lambs last season, followed by a look at their Gallagher auto-drafter and a pasture tour.

Above: The Arkle Farms Cherylton Stud (next year's bulls) enjoying a mix of Margarita Serradella, Balansa Clover, Atain and Fantastic Ryegrass.
Below: Arriving at the Newman's staff room with walls built of old beer bottles.

Above: A beer in the paddock as the sun goes down over the Newman's Biserulla (with Barley sprayed out).

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Above: Moojepin Merinos sale ram line-up.
Below: David Thompson's greenhouse.

Day 2: Lake King to Katanning

- ***MOOJEPIN MERINOS (BADGEBUP)***
- ***GENSTOCK (KOJONUP)***

After an evening at the Lake King Tavern, we rose early to make our way to meet the Thompson family at Moojepin Merinos. David and Hamish gave us a great overview of their operations, including their strategies around stud development and flock management.

The Thompsons place a strong emphasis on achieving genetic gain in their flock and have been taking skin samples and testing since 1998, chasing growth, muscle, fat and staple length. In 2004, they transitioned to non-mulesed with key management choices including having a zero tolerance for wrinkle, setting tail length at the 3rd joint and shearing biannually.

Their program includes mating ewe lambs at six months and they have a strong focus on achieving optimal fertility and increasing lamb survival - demonstrating some impressive stats. Joining is down to 28 days, ewes are scanned for singles / twins and foetal ageing. Twin mobs are set at around 40-42 head on about 18ha, dividing up paddocks with portable electric fencing to achieve this. Thanks to the foetal ageing each mob is down to a two week lambing window.

A tour around the property included management of salt affected areas where over 75,000 salt bush had been planted over 5 years, plus a surprise visit to David's greenhouse, where he is perfecting the art of growing edible salt-tolerant plants for the restaurant market.

Next stop was to Genstock and the Heggaton family's farming operation. We started things off with Michylla Seal, who took us through artificial sheep-breeding and treated us to a demonstration of the semen recovery process (image right).

Craig and Liz Heggaton then took us for a tour through the farm, where they run four studs (Poll Dorset, White Suffolk, Kojak and Prolific) and a significant sheep / cropping operation. A stop by their feedlot was very interesting, it has been set up for stock to gain a minimum of 330g p/head p/day. Craig sets a minimum weight for stock going in via an auto-drafter and allows them a stay of 5 weeks max to reach target.

This is made possible by the Heggaton's partnership in the Kojonup Feed Mill, located on property. The mill produces a range of pellets specifically formulated for sheep and cattle at different stages - starting, finishing, maintaining, weaning. A tour through the plant was pretty impressive.

The day finished off with a meal at the Premier Mill Hotel, where Ned Capper from Kojonup Ag Supplies took us through a product called Alkagrain that mixes in with grain, improving feed safety, digestibility and storage.

Above: Ram over a teaser ewe for semen collection.
Below: Kojonup Feed Mill.

Day 3: Katanning to Albany

- ***GLENRIDGE PARK (MT BARKER)***
- ***CALUKA FARMS (NARRIKUP)***
- ***GLENERIN FARM (FRANKLAND RIVER)***

Day three started with a visit to Glenridge Park where the Slades run a mixed crop (3000ha) / cattle (600) / sheep (8000) enterprise. With biosecurity at the front of mind, they have a closed farm and breed all replacements - no new stock come in. Their sheep (inc. stud) are a Greeline Maternal Composite, a breed that was developed in NZ for superior growth, fertility, mothering and carcase qualities, achieving about 140% lambing. You can see from the photo that they certainly grow! The Slades also run cattle - Sussex with Black Angus cross.

Technology is at the forefront of their operation; we had the chance to enjoy a demo of the fencing system they have designed to roll out from the front of a tractor with the mesh then clipping into custom posts - a massive time saver. They had also set up an example of their feeding system and ran sheep through their Prattley V Machine that enables them to process 1000 lambs p/hour at marking. How I managed to keep getting everyone back on the bus is a mystery.

Above: Rob Agnew with a Greeline Lamb, max 8 weeks.
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Next to Caluka Farms where Wayne Smith has been driving an investor-backed sheep operation, with the intention of pushing the limits to demonstrate just how well a Kyke-based pasture can perform under the right conditions, and with plans to expand.

Wayne advised that the 185ha (arable) property is designed to run 50 DSE from May-Jan, focused on meat production. Sheep are moved every 7 days, including during lambing.

The farm was purchased in 2018, cleared of blue-gums and underwent extensive pasture renovations. The property was stocked with what Wayne could access at the time, resulting in a range of breeds being brought in. There have been issues with worm control and ideally Wayne would like to transition to a worm-resistant breed in the US that he is currently unable to import due to Scrapie resistance. Wayne has a blog at www.calukafarms.com/blog for those who would like to find out more.

After a stop by Limeburners Distillery, we were treated to a talk from Richard Coole, who joined us over dinner with wife Deb. The Cooles run 6000ha (arable), with 2500ha in crop and 31,000 merino sheep, plus cross breeding. The flock is DNA profiled.

Richard took us through the intricacies of the containment feeding system he has been perfecting to work around the Autumn / Winter feed gap. They plan to confinement-feed for 10-12 weeks each season, with 31,000 head going into the system. The Cooles make their own silage, with Richard commenting the sheep will drink 10L p/day when on it.

Left: The Slade's custom fencing system. Right: Pasture at Caluka Farms.

There is a focus on vaccination, getting the right mineral mix and managing the safety of grain. Sheep are released when there is ideally about 700kg dry matter in the paddocks with grain being continued to be fed for several weeks post. It is well worth a conversation with Richard if you get a chance.

Day 4: Albany to Esperance

- ***PAPER COLLAR GRAZING CO (AMELUP)***

Last stop on the tour was at Marcus Sounness's Paper Collar Grazing, with spectacular views of the Stirling Ranges. Marcus gave us a run down of his operation where they generally run around 6000 ewes. Rain has been a challenge recently, and their long-term average DSE of about 8.5 is down to 5.5. They received 180mm last growing season.

The flock has been non-mulesed for the last 14 years, with a focus on selecting lambs against breach wrinkle and urine stain over the cradle. The lambing window is down to 4 weeks over July.

Pastures are 60-80% perennial with some annual (lucerne, chicory, bit of Kyke and spelt grass), grazed rotationally until set-stocking over lambing. We had a tour around the farm finishing at their covered yards, with key sections leading out of the race built as portable to adjust as required.

With a heavy heart I forced all the tour guests "back on the bus" and we headed home. A huge thanks to everyone who took time to take us through their farms and to all who came along. It certainly gets you thinking.

Left: The tour group with Marcus Sounness. Right: Covered, adjustable yards at Paper Collar Grazing.

DWER Dry Season Update

Kaylene Parker, Rural Water Planning, Department of Water and Environmental Regulation (DWER)

Water Deficiency Declarations declared for Salmon Gums, Cascades and Grass Patch are temporarily suspended due to sufficient rainfall runoff into on-farm dams to support current livestock. Rural Water Planning will continue to monitor the situation as summer progresses to determine the status of all available supplies and livestock needs.

Ms Calvert, Manager of the Rural Water Planning team said “farmers have worked hard over the dry seasons to improve their on-farm water supplies by cleaning out dams and fixing catchments, however it is still critical to evaluate if this water supply is adequate to get through future dry seasons”.

“The Department is offering assistance for a farm water supply plan through the Farm Water Supply Planning Scheme, where a water auditor can help farmers identify ways to improve the reliability of their on-farm water supplies. Eligible farmers may apply for funding of up to $1,000 to cover 50% of the audit cost she said”.
Visit: https://www.water.wa.gov.au/planning-for-the-future/rural-water-support/farm-water-supply-planning-scheme

The Department will continue to monitor all water supplies in cooperation with the Shire of Esperance. To assist us to evaluate on-farm and off farm water supplies, farmers are encouraged to fill out the Dry Season Survey or contact a member of the Rural Water Planning Team (08) 9841 0100.
Visit: https://www.surveymonkey.com/r/dryseasonsurvey2020

WA Shearing Industry Association Update: SafeSheds – the Shearing Shed Safety Program

Valerie Pretzel, WA Shearing Industry Association

Australian Wool Innovation (AWI) and WA Shearing Industry Association (WASIA) have launched the newly developed *SafeSheds*, The Shearing Shed Safety Program.

AWI's General Manager, Woolgrower Services Stephen Feighan says this is an important program for woolgrowers. "The shearing industry is one of the most physically demanding occupations out there. As an industry we need to do as much as is possible to reduce the risk of injuries and accidents occurring in shearing sheds as well as provide the best working conditions possible. Not only will this go a long way to increase entry, retention and longevity of staff, it will also improve industry productivity and profitability".

WASIA President, Darren Spencer highlighted that shearing is a high-risk occupation. "*SafeSheds* will assist in improving conditions for those working in shearing sheds and improve compliance with modern workplace standards to reduce risk and injuries and to reduce insurance and worker's compensation claims. As an industry we need to ensure we are doing everything to reduce the likelihood of injuries and accidents occurring in our shearing sheds and increase our ability to attract and retain staff."

SafeSheds, The Shearing Shed Safety Program is a new best practice guide and assessment resource which has been developed with input from right across the industry. It aims to:

- Provide employers with an understanding of their duty-of-care obligations
- Provide a best practice guide, checklists and a handy mobile app to assist woolgrowers shearing contractors and shed workers to assess their current shearing shed working conditions, environment and equipment
- Allow woolgrowers to create an improvement program to improve and comply with modern workplace standards
- Make the workplace safer for all participants with health and safety as priorities for the wool harvesting industry by identifying and rectify safety hazards and providing options to manage risks and conditions in the shearing shed.

The guide and self-assessment tools have been developed to provide woolgrowers and shed staff with a better understanding of the risks and options to mitigate those risks.

By planning and documenting the improvements and steps to control risk, woolgrowers will be able to provide direct evidence of efforts in managing safety as required by relevant State Workplace Health and Safety Legislation.

The program has four sections:

- Legal Obligations of people involved in shearing
- Guidance on how to assess and manage risks by using this assessment guide
- Detailed best practice guidelines for all areas of shearing operations
- Assessment checklists

The Program is also an industry collaboration, harnessing the support of industry with WoolProducers Australia, Pastoralists & Graziers WA, WA Farmers' Federation and Shearing Contractors' Association of Australia.

Visit www.wool.com/safe-sheds for more information.


SAFE SHEDS - THE SHEARING SHED SAFETY PROGRAM

MODULE 1 - THE SHEARING SHED

ITEM #	HAZARDS / RISKS	RISK CONTROLS + OPTIONS FOR IMPROVEMENTS & CORRECTIVE ACTION
1.1	SHED STRUCTURE	
1.1.1	The Shed Structure is sound and safe to enter, including shed frames, beams, flooring, roof and walls.	
1.1.2	Platforms All platforms over 1000mm (1m) high have safety rails & gates or chain as suitable barriers. The edges of the platform and loading edges of steps are painted with a bright stripe to improve visibility.	Consider installing rails or light chains (fixed or removable) along the edge of raised platforms. Refer to the Australian Standard AS1657-2013, Fixed Platforms, Walkways, Stairways And Ladders – Design, Construction and Installation"
1.1.3	Step/Stairs All steps and stairs are in good condition. "Steps" should not be a "ladder"! Steps are securely fixed in place, non-slip, deep & wide enough to tread on safely. Steps are evenly spaced and not too high. Steps should not have a horizontal gap between them or a gap between the steps and the wall which could allow workers to step through the gap.	Replace 'ladders' with fixed steps with extended handrail to 900 mm above the top floor. Ensure steps are level, secure and not slippery. Consider 'scabbling' timber steps. Repair/replace rotting, loose or broken steps. Install deeper steps or extra steps to make 'step up' shorter or to eliminate horizontal gaps. Extend steps to the wall to fill any gaps.
1.1.4	Handrails Handrails are fixed to the outside of any steps. All handrails are strong and stable. There are no 'finger traps' in open end pipes.	Install handrail on the outside of steps. Repair or make the handrail stable. Cover/fill open end of rail pipes.

SAFE SHEDS - THE SHEARING SHED SAFETY PROGRAM | MODULE 1 - THE SHEARING SHED 12

ASHEEP is a group member of the WA Shearing Industry Association and full details of WASIA services are available from the website www.wasia.com.au or you can contact the WASIA office by calling 0412 227 252 or emailing to admin@wasia.com.au.

WA SHEARING INDUSTRY ASSOCIATION (INC)

Upcoming ASHEEP Events

ASHEEP is gearing up for the 2021 line-up. Early in the year we are planning:

- A **Saltland Masterclass** with the Gillamii Centre and all kinds of experts in the field.
- A **working dog training school** with Neil Kristianson
- A **Rhizobia Workshop** in conjunction with PACE and SEPWA
- Our **Autumn Field Day** around March / April

It looks like COVID-19 has thwarted our plans for a visit to LAMBEX with the event being cancelled for 2021, but we will keep an eye out for other opportunities.

Keep an eye on your emails, or if you do not have an email address then give Sarah Brown (Executive Officer, ASHEEP) a call on the number listed below to be kept updated.

WALRC Newsletter

Subscribe to the WA Livestock Research Council newsletter.

www.walrc.com.au
admin@walrc.com.au
0418 931 938

FEBRUARY

Next ASHEEP Committee Meeting is scheduled for February 2020.

Contact a committee or staff member by 2nd February to raise an item.

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