CONTAINMENT FEEDING TO MANAGE A FEED GAP

SPRING 2019 NEWSLETTER

CONTAINMENT FEEDING TO MANAGE A FEED GAP

Key points for containment feeding and pasture deferment:

- **Plan ahead and work out your feed budget to know how much hay/silage and grain you need to have on hand and ensure you have the equipment and labour to feed it.**
- **Make sure you have plenty of access to quality drinking water.**
- **All vaccinations and supplements need to be kept up to date.**
- **Know your pastures and stocking rates – Work out what Feed on Offer (FOO) level is needed before grazing to allow pastures to handle your stocking rate for the remainder of the season.**
- **Hold your nerve – don't let them out too early, let the pastures get away before sheep are allowed to start grazing.**

COOLE FAMILY, FRANKLAND WA

Alex Coole farms with her parents west of Frankland and is currently the Chair of the Producer Advisory Panel for The Sheep's Back network. When we visited Alex and her father Richard in May, 2019, the Coole family were feeding 30,000 sheep in containment, with all pasture paddocks being deferred to allow for good growth levels before sheep are stocked onto them for the rest of the season. Ideally, Alex would like the paddocks to have a coverage of 1000 kg DM/ha Feed On Offer (FOO) with a minimum of 700 FOO before sheep are allowed to access them.

By deferring pasture paddocks at the break of the season, it allows them to carry a higher stocking rate for the rest of the year and utilise the feed they produce through winter and spring. With a mix of cropping in their system, they also have stubbles available to carry sheep through early summer. About one third of their land is used for cropping with a 2,000 ha program consisting of 900 ha of canola, 300 ha of fodder for lambs and the remainder to oats and barley.

Stocking rates vary across the farms, with the south west area of their properties being higher rainfall and carrying up to 16 Dry Sheep Equivalent/winter grazed hectare (DSE/wgha) while more north eastern areas with lower rainfall are stocked at around 12 DSE/wgha. The stocking rate potential of different paddocks would be able to be found in historical files and diaries but both Richard and Alex recognised a lot of this knowledge is simply in their heads.

They have looked into data management apps but haven't found one that quite ticks all the boxes in their sheep enterprise. They use WhatsApp chat groups between staff to manage movements and advise on increases to feed rations, etc in conjunction with Monday morning meetings and worksheets for staff.

Alex used to rely heavily on Pastures From Space technology to provide accurate paddock by paddock data on available FOO levels to assist in making the decision as to when to let sheep onto pastures. DPIRD are now running a similar program which provides the satellite information on FOO levels (available by searching Pastures From Space on DPRID's website www.agric.wa.gov.au). It also allows them to set stocking rates for each paddock depending on the amount of pasture available. Dry sheep are stocked at a heavier rate and tend to be given the poorer performing country. Their enterprise structure does involve a large percentage of dry sheep with ewes not being mated until 2.5 years old and wethers being run through to two years old, which allows these sheep to be moved more easily, regularly and be locked up tighter for longer if needed without the increased risk that pregnancy brings.

Lambing occurs through late July and early August, with a staggered timing between farms to allow for logistics at marking time. They crutch their ewes at the same time as they mark the lambs in September. A VE machine is set up to lead into the crutching cradle where a vaccination is given at the same time.

They find that with an August crutching time for the dry sheep, they can get through to December shearing without any major fly strike issues.

Shearing occurs from the first week of November and runs for six weeks, with a short break and then the rest completed in January. The Coole family have kept shearing time all in one block for ease of management. The lambs are shorn in early January, after a preventative jet in December to protect them from flystrike and they produce about a 40 mm clip when shorn.

After crops are harvested, sheep are moved on to cereal stubbles to utilise any feed left in these paddocks. Once the cereal stubbles are consumed, they are rotated onto canola stubbles which are processed by a Stubble Cruncher machine to break up the stubble and lay it onto the ground rather than upright, which the Coole's believe leads to increased consumption.

After sufficient rain that will cause germination, sheep are locked on to stubble paddocks and as these paddocks are seeded they are progressively locked up into smaller paddocks and fed a full feed ration. Sheep are removed from stubble paddocks after autumn rain to allow for an effective first knockdown spray but are then returned to stubbles. Pastures have no sheep at all on them over autumn, allowing maximum pasture production in these paddocks for the sheep once off containment.

Figure 1: Sheep in containment on a canola stubble paddock at the Coole's property near Frankland, Western Australia.

CONTAINMENT FEEDING

The smaller paddocks where sheep are held through autumn are referred to as sacrificial paddocks as they will not be seeded until after the sheep are released and will obviously not be able to grow any significant feed while sheep are held in them. These sacrificial containment paddocks are rotated each year as they try to avoid overuse of them for risk of disease carryover and to make sure dams are not overused or contaminated. The Coole's rely solely on good sized dams to water stock, investing in several new dams each year and adding new dams to a paddock if the existing dam is underperforming. One paddock we visited had 2,300 ewes on 15 ha with just a single large dam that looked very clean, supplying all sheep without any issues. Mobs in containment are mostly kept to about 1,000 head in size and are often held at a rate of 50-100 sheep/ha. Mobs of over 2,000 are not ideal and can cause an increased risk of feed and water contamination, as well as a more rapid spread if any animal health issues occur, therefore needing extra monitoring.

Feed rations start at about 0.5kg/hd/week of lupins while weaners are on fodder, which in addition to improving the utilisation of the dry fodder, also helps to get lambs used to eating trail fed lupins while administering selenium and vitamin E to young sheep by coating the lupins. Adult sheep also get mineral coated grain whilst on stubbles. Silage starts at about 0.5 kg/hd/week in open containment (nearly worn out stubbles) and cereals are introduced in combination with lupins as the feed availability decreases. Dry sheep get 50MJ/head/week continuously in containment, pregnant ewes progress from 50 to 100MJ/head/week depending on the stage of pregnancy and when they are able to be released from containment, which is subject to the season.

Once the sheep are moved to tight containment, it is assumed they are no longer receiving anything from the paddock and a complete diet must be fed, which means the barley component of the diet is increased gradually as pregnancy progresses and feeding occurs three times per week.

Barley is used as the cereal grain at that start of feeding, with oats kept until later as they are a 'safer' option when fed at high rates. In late pregnancy, it is hard for sheep to consume enough barley to get the required energy without issues of bloat and/or poisoning, so oats plus lupins are mixed in to make the barley mix safer as it gets closer to lambing and nutritional requirements increase significantly.

During containment, lime is added to the grain to provide a calcium supplement to pregnant ewes, weaners receive Vitamin E every five weeks, similarly a liquid mineral is added to feed for all sheep every five weeks. With this supplement regime, they have not seen any deficiency issues. Sheep are always up to date on vaccinations and get a yearly top-up so no extra vaccinations are required prior to containment.

Sheep are usually contained for two months, sometimes up to three months depending on when the first rains occur, and then how quickly pastures continue to grow and get up to a level that can sustain grazing at a full stocking rate. When they are released from containment into lush green pastures, there can be an issue with Pulpy Kidney and the Coole's have experienced issues with a small number of sheep on a few occasions. To try and avoid this, they now feed a full offering of hay or silage the day prior to being let out onto green feed which helps to avoid sheep over indulging immediately. They also continue to offer some grain after sheep are on pastures to avoid the sudden diet change but often find sheep are not interested in the grain once ample green feed is available. Weaners require careful observation for this issue but all sheep should be okay and settled onto the green feed after two weeks.

There is a time limit with pregnant sheep in containment as lambing in containment is not an option and feeding during lambing is to be avoided. The latest ewes have been left in containment in this system is one week prior to lambing in a very slow and dry start, which was not ideal, but the extra week they were kept in there meant quite a bit more pasture growth and FOO when they were released. At pasture growth rates of 150kg DM/week it pays off to hold them another week to reach the total FOO target. It is generally recommended that ewes be released from containment 4 weeks prior to lambing to try and minimise stress. In a slow start, ewes will be given their pre lambing vaccination and placed back into containment.

Figure 2: Alex Coole standing in a pasture paddock that has been deferred to allow for maximised pasture growth while sheep are held in containment.

Once sheep are removed from containment paddocks and spread out onto pastures, the paddock will then be seeded to fodder or silage but there is a definite loss of yield potential by seeding so late.
The Coole's usually pregnancy scan their ewes and separate into single and multiple bearing mothers because of their different feed requirements. This allows for feed to be managed optimally with more regular feeding and increased grain rations added to the diets of those carrying multiple lambs as well as ensuring that single bearing ewes are not overfed.

PRODUCING AND DISTRIBUTING FEED

The Coole family make a lot of silage on farm in spring to capture the excess feed at this time of year and allow them to utilise it in autumn. It started opportunistically, capturing excess spring growth, but is now a strategy to set-up paddocks for silage production. Paddocks are sown to clover, ryegrass and oats, with sheep being removed from some paddocks to allow the FOO to increase ready to be cut, usually in October. Silage yields are between 2.6 – 6.6 t/ha of dry matter. Paddocks cut for silage more often than not will return to a crop rotation, however, if silage paddocks are to go back into pasture, they will be locked up again after cutting to allow for seed set or are to be re-seeded. Extra N, P and K fertiliser is applied to these paddocks.

Richard has a silage feed cart with power pack set up on one ute, which can unroll two bales at a time, but it still takes at least a full day to feed out silage to the whole flock twice a week. Occasionally there are issues with listeriosis when feeding silage, usually when the wrap has become damaged, often by white cockatoos on their property. The key is to make sure the silage is fully unrolled and spread out as much as possible to avoid any further contamination. While this is one downside of silage compared to hay, the Coole's experience issues with hay being spoiled by rain during the hay making process so silage fits best in their system.

The Coole's retain a lot of the cereal grain grown on their farm. In most years it is all stored and sold later if there is excess to feed requirements. As a rule of thumb, they keep 50 kg per head plus 500 - 1000t spare which is then sold if not needed. Canola that is produced as part of the cropping rotation is sold and all lupins that are fed are bought in as they do not currently grow them.

They use several trailing feed carts to deliver grain to sheep, taking three staff three quarters of a day each at peak feed times. While consuming a lot of labour and time, by having the flock locked up in containment paddocks, it does mean it is quicker to feed all the sheep than if spread across the entire property.
Silage depots are set up strategically to be close to containment paddocks and each farm will have two depot locations, to avoid having to load and carry the feed too great a distance.

SUMMARY

Richard said "the biggest temptation is to let them out too early, but it's the biggest mistake! Keep them in a week or two longer than you think." It can also be tempting to graze if you get an early rain – for example this year the Coole's had some rain in early March which lead to an early germination but a few weeks later had received no more so what had germinated looked to be dying. The neighbour thought they were crazy not making use of the green feed that was there but the Coole's kept sheep off the paddocks and when they did get more rain, the pastures took off again. They received a phone call from the neighbour saying he had 'never seen dead grass grow' but as Richard says "Once roots are established, it is amazing what will hold on".

Contained sheep do need to be monitored closely. If something goes wrong or an illness occurs it can spread quickly in a feedlot situation. They also experience sheep breaking out of their paddocks, especially when the containment paddock borders a paddock that is locked up and growing nice green feed, so they need to be regularly checked and moved back to their paddocks if needed.

Containment feeding is not a new idea, the Coole's have been using the principles for around 20 years and the system works well for them. They are happy with their results in increased pasture growth and will continue to use this process to increase pasture yields. Being prepared with the correct paddocks and ample feed supply is essential and while the sheep do take a lot of time to feed and monitor, it is actually logistically simpler than if sheep were spread across every paddock.

Containment feeding is not limited to drought and dry times, it is an annual management tactic for the Coole's to allow increased pasture establishment and FOO in autumn and early winter each year.

Among other resources, the AWI website has the below containment feeding related publications available online at www.wool.com/droughtresources

- **Managing sheep in droughtlots**
- **Managing fodder prices for drought**
- **Drought feeding and management of sheep**
- **Feeding & managing sheep in dry times**
- **Releasing sheep from containment feeding**

AWI ONE DAY WORKSHOPS

AWI has developed three new workshops to aid woolgrowers in identifying key, practical actions for their enterprises to implement on-farm to achieve improved productivity. Each workshop is designed to run as a single event, while complementing the others to provide woolgrowers with support for important management.

PICKING PERFORMER EWES

The Picking Performer Ewes (PPE) workshop is aimed at lifting lifetime performance from Merino ewes by recognising and placing importance on the total lifetime productivity potential and value of their Merino ewes (fleece, meat and surplus stock).

Participants will step through sessions relating to the whole reproductive cycle, and focus on understanding ewe lifetime performance and the concept of 'passengers vs. performers'; the importance of undertaking the three key performance practices of scanning, condition scoring an wet & drying at marking; turning potential into profit by lambing and weaning well; and strategies for success – mapping it all out in a management calendar.

RAMPING UP REPRO

RAMping Up Repro (RUR) is a hands-on workshop focussed on improving ram performance and working longevity in commercial sheep enterprises, increasing the skill of producers across the key components of ram performance and impacts on overall breeding enterprise performance.

Each participant is guided through a thorough pre-joining ram inspection by an accredited deliverer and given the opportunity to increase their practical skills to undertake this in their own operation. The workshop is designed to give attendees the confidence to incorporate these skills into their own routine management, thus improving the performance of their rams.

WINNING WITH WEANERS

Winning With Weaners (WWW) is aimed at lifting the lifetime performance from Merino ewes through improved management of weaners. WWW assists participants in understanding the key issues affecting weaner survival and performance and guides them through developing targets for growth for this key cohort of sheep. The workshops discuss factors that contribute to weaner mortality and illthrift and provides practical pathways for improving lifetime performance. Participants will gain an understanding of the impact of weaning weight on the survival of weaners to first joining; weaner nutrition - both energy and protein; the importance of weaner management on lifetime performance of breeding ewes; and strategies for success – mapping it all out in a management calendar.

WHAT YOU NEED TO KNOW ABOUT THE WORKSHOPS:

- one day workshop (9:00 am – 2:30 pm)
- 15-25 participants
- delivered by accredited consultant
- $75 per person

WORKSHOP ATTENDEES RECEIVE:

- a full set of workshop notes
- usef ul tools to assist with monitoring and planning
- checklists for use in your operation
- information on pathways for future training

FOR MORE INFORMATION, TO DISCUSS POTENTIAL WORKSHOPS OR TO CHECK FUTURE WORKSHOP DATES AND LOCATIONS, PLEASE VISIT ONLINE OR CONTACT THE SHEEP'S BACK.

THE SHEEP'S BACK
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