



BLACKDOWN

FARM VETS

AUTUMN 2022

Newsletter

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Welcome to Blackdown Farm Vets Autumn Newsletter!



After a busy and extremely hot Summer, Autumn is finally here. Now is the time to start preparing for the coming Winter and Blackdown Farm Vets are here to help. Please feel free to get in touch with one of the team for any further information.

Dates for the diary

Dairy Show - Wednesday 5th October
08:30 - 17:00

Inside the Edmund
Rack Pavilion
(Nearest yellow
gate!) - Stand 114



Wednesday 5th October - Southwest Dairy Show, Bath and West Showground
11:30 Friday 18th November - Red Tractor Medicines Course, Blackdown Farm Vets. Please RSVP
19:30 Friday 9th December - Christmas Party, Stockland Village Hall. Please RSVP by 2nd December



Flushing - Are Ewe doing it efficiently?

Vet Will Goulden

With the recent drought period affecting grass growth, ewes that have been selected for breeding are thinner than expected or have struggled to gain condition after weaning. Having ewes in the right body condition is key to maximising ewes cycling and ovulating multiple eggs.

Correct body condition at tupping is important for fertility, with ovulation rates reduced by 0.45 for every one unit in BCS. Ewes should ideally have a body condition score (BCS) of 3-3.5 at mating to maximise production. Ideally body condition scoring should be carried out a month pre-breeding. Thinner ewes should then be separated for closer attention. Research shows that providing fresh pasture and supplementary feed, putting the ewes on a rising plane of nutrition (flushing) 2-3 weeks pre-breeding and up to 4 weeks post breeding has a positive effect on ovulation rates, leading to increased numbers of lambs.

The response to flushing is influenced by:

- Age of the ewe - mature ewes show a greater response than yearlings.
- Breed - prolific breeds are least responsive.
- Body condition - thin ewes respond more than those in above average condition
- Stage of the breeding season - greatest response is seen early and late in the breeding season.

How to Condition Score

 <p>Score 1</p>	<p>The vertical and horizontal processes are prominent and sharp. The fingers can be pushed easily below the transverse and each process can be felt. The loin is thin with no fat cover.</p>
 <p>Score 2</p>	<p>The vertical processes are prominent but smooth, individual processes being felt only as corrugations. The horizontal processes are smooth and rounded, but it is still possible to press fingers under. The loin muscle is a moderate depth but with little fat cover.</p>
 <p>Score 3</p>	<p>The vertical processes are smooth and rounded; the bone is only felt with pressure. The horizontal processes are also smooth and well covered; hard pressure is required with the fingers to find the ends. The loin muscle is full and with a moderate fat cover.</p>
 <p>Score 4</p>	<p>The vertical processes are only detectable as a line. The ends of the horizontal processes cannot be felt. The loin muscles are full and rounded, and have a thick covering of fat.</p>
 <p>Score 5</p>	<p>The vertical and transverse processes cannot be detected even with pressure; there is a dimple in the fat layers where the processes should be. The loin muscles are very full and covered with very thick fat.</p>

Image taken from the better returns programme, Eblex (AHDB)

Flushing is especially beneficial for thin ewes that have not recovered from previous lactation stress. There appears to be no response to flushing in ewes that are already in above-average condition.

Careful grazing management may be required to help ensure BCS targets are hit. A 70kg lowland ewe has a daily energy requirement of 8.4MJ for maintenance. An adult ewe would be expected to eat about 1kg of dry matter (DM) a day.



Flushing - Are Ewe doing it correctly? continued...

Autumn grass is estimated to have a feed value of 10MJ/Kg of dry matter, so grass alone will provide enough energy for maintenance and flushing those in good BCS but will not provide sufficient energy for thinner ewes to gain BCS. To gain condition, ewes will need an additional 3.5MJ a day to put on 0.5 BCS. For example, ewes with a BCS of 2 require an extra 7MJ daily, which can be achieved by feeding supplementary feeds like ewe rolls or oats. Grass quality assessments are recommended to determine if the grazing is sufficient and further advice should be sought for concentrate amounts to be supplemented.

Ram nutrition

Don't forget ram nutrition in the run up to tupping. Rams should enter tupping at BCS 3.5-4.0 and so for six to eight weeks prior to tupping rams should be fed a high-quality protein supplement (16%). Not only will this improve their general condition, but it can also improve semen production.

Supplementary selenium can also help improve sperm quality; however this should only be used if there is a deficiency on farm.



Post mating Supplementary feeding

Feeding post mating is advisable for sheep that have been flushed. The reason for carrying the plane of nutrition on after breeding is to decrease embryonic death loss. The extra feed ensures the fertilized eggs have a much better chance of attaching to the uterus wall, rather than being reabsorbed due to lack of energy from the ewe. It is recommended that post mating sheep should be fed for 3-4 weeks to maximise this period.

However, flushing should not be continued too long after the breeding season, as an extended period of high feeding is unnecessarily costly and provides no improvements in ewe performance and productivity over a maintenance level feeding program.



Improving profitability in the suckler herd

Vet Lottie Birchall

There has never been a more important time to focus on making your suckler herd more efficient and therefore profitable, due to escalating costs, changes to BPS payments, and environmental regulations.

Figures from AHDB show that, before subsidies, the average suckler herd in England is losing £196 per cow put to the bull. With subsidies being phased out, we



must therefore make changes to ensure the suckler herd has a sustainable future.

What drives profit on a suckler farm?

1. Increased output = kg beef per cow, NOT price per kg which is out of your control, so focus on how many kg you produce.
2. Decreased costs where possible
3. Sustainability is vital – both financial and environmental

Fertility

Maternal performance is key to profitability on suckler farms:

- It is 5 x more important than growth rates and 10 x more important than carcass quality
- On average in the UK, only 82% of suckler cows are producing a calf every year.
- It costs around £650/year to keep a suckler cow, and with 18% in the UK not producing the output needed, it has a huge effect on profits.

Key Performance Indicators (KPIs):

It is very important to record as much data as possible to make improvements. The main KPIs to focus on are:



Improving profitability in the suckler herd continued ...

KPI No.1 - Cows and heifers calved in the first six weeks of the calving period

- Target: 75-85%
- The earlier the cow/heifer calves in the block, the longer she has to recover before getting back in calf again
- Both cow/heifer and bull fertility need to be focused upon to achieve this

Preparation of cows and heifers before they go to the bull is vital:

- Nutrition – group and feed according to body condition score (BCS)
- Disease and trace element status – need to blood sample

Preparation of bulls:

- 20-25% of bulls are sub-fertile
- Bull MOT 2 months before use, every bull, every season
- Bull selection – EBVs - focus should be on maternal traits -terminal traits are already good

Aim: for each cow to wean a calf at 200d at 50% of her bodyweight

- Want as many calves born early in the block as possible to produce a heavier, more uniform group of calves
- Tightening the calving block will improve weaning weights (9-10 weeks max)

KPI No2. - Calves born alive (as % of females put to the bull)

AHDB figures show on average in England only 85% suckler calves are born alive, so there is a huge opportunity for improvement.

- Select easy calving bulls
- Measure cow/heifer BCS at calving
- Intakes can be limited in mid gestation – will have the biggest effect on calf size (NOT late gestation)
- Mineral and trace element status – must blood sample
- Slow calving can be due to subclinical low calcium
- Investigate abortions and stillbirths (infectious disease, trace elements)

KPI No.3 - Calves weaned (as % of females put to the bull)

- Calves need high quality colostrum as soon as possible after birth
- Cows often need protein supplementation in the month before calving to improve quality and quantity of colostrum produced
- Reduce cases of scour/pneumonia/joint ill etc

KPI No.4 - Age at first calving

Target: to calve beef heifers at 24 months old

- Currently only 1/3 of the national suckler herd is calving heifers at 2 years old
- Group the heifers and first calvers together and increase feed quality and intake (so they get back in calf)
- Put heifers to the bull before/at start of main block so they have longer to get back in calf - Bull heifers for 6 weeks
- Regular weighing – need to be 65% of mature bodyweight at bulling
- Know your mature cow weight - More efficient to have smaller cows = lower maintenance costs

Table: An example of different age at first calving. Showing on average over the lifetime of the cow, 250kg more beef was weaned if calved in at 2 years old:

Age of heifer/cow	KG of beef produced	
	Calve at 2yo	Calve at 3yo
2yo	250kg @weaning	-
3yo	270kg	270kg @weaning
4yo	270kg	270kg
5yo	270kg	270kg
6yo	270kg	270kg
Total	1330kg	1080kg

KPI No. 5 - Replacement rate

- Particularly on farms running a spring and autumn calving block, it can be very tempting to push cows that don't get in calf round to the next block
- Therefore, you are selecting for the less fertile cows.
- Much more profitable to cull these cows and replace with your own heifers.

Take home messages:

- The best way to improve profitability in the suckler herd is to tighten the calving period
- Smaller cows are much more efficient
- Successful farms will aim to make improvements each year
- Work with us to improve efficiency now, to have a sustainable suckler herd for the future



Don't forget about bull fertility!

Vet Lucy Morgan

As a practice, our clients are pretty proactive on the subject of fertility in cows. We vets spend a good proportion of our time checking cows and heifers for fertility problems in the hopes that we can get on top of the issue and keep it's potential financial impact to a minimum.

But, how many of us using bulls are being equally proactive with the bull? When a bull is used in a group of animals, 50% of the reproductive performance of the group is down to that bull.

If we have a bull that is not working at all, we tend to find many of the cows or heifers returning and we start to wonder what's going on. As vets, we do see situations when we are getting only negative PDs several weeks into the breeding season.

However, it is pretty rare to find a bull that is completely infertile. Much more common are bulls which are subfertile. These bulls can be trickier to notice, but will have a significant financial impact in the long run.



Image: Young Hereford sweep bull used in a group of heifers

Consider a block calving situation:

A fully fertile bull when run with breeding groups of 40-50 cows should be able to achieve an average conception rate of 60%. This means that by 9 weeks into the service period at least 94% of cows should be pregnant.

However a subfertile bull who, for example, can only achieve a conception rate of 40% will result in only 78% of those animals being in calf at 9 weeks. A bull with a conception rate of only 20% will only have got 49% in calf by week 9.

If we extend this example to 12 weeks, then approximately 98% will be in calf to the fertile bull (assuming all cows are healthy and fertile) and only 87% or 59% in the subfertile bulls with 40% or 20% conception rates respectively.

When a bull is running at a slightly lower conception rate, it is likely that no-one has actually noticed that much is wrong. However, the end result is likely to be significantly more barren cows and a higher replacement rate and/or a more protracted calving period. Extended calving periods lead to more problems with calf scour (more bugs build up by the end of the calving period, therefore posing a bigger risk) and pneumonia (bigger calves can be responsible for spreading pathogens to the more vulnerable smaller calves they are running alongside). An extended calving period due to fertility problems one year can take several years to pull back to where you would like it to be.

A subfertile bull used as a 'sweeper' bull in a dairy herd could easily go unnoticed and waste time and money. If we are going to rely on a bull to get problem cows in calf where AI has failed we need him to be top notch fertility himself!

Current data suggests that one in every five bulls is subfertile.

How can bull fertility testing help?

The main uses of bull fertility testing are:

- 1. Prior to purchase/sale.** To minimise the chance of spending money on a problem bull, or for certification purposes for the sale of your own bull.
- 2. Prior to use.** The fact that he got most cows in calf last year does not guarantee fertility this year. As bulls age, subfertility becomes more common. When multiple bulls are kept it is normally the older animals that are the most dominant, but they are also more likely to be sub-fertile. As a result, the older animals may be preventing younger, more fertile animals from mating. Increasing the number of bulls does not necessarily solve this. We recommend testing around 2 month before the bull is required so that there is time to sort problems (or replacements!) prior to breeding.
- 3. When there is a problem.** This can be a way of identifying any problems in a suspect bull.



Don't forget about bull fertility continued ...

What is involved?

Bulls will get an overall health check and a thorough health check of the reproductive system.

A semen sample is taken using electro-ejaculation, a simple quick procedure which can be carried out easily and safely in a crush.

The sample is assessed for volume, concentration and contamination. It is then examined under the microscope for both motility (how active the sperm are) and morphology (an examination of the individual sperm under high power to check for any abnormalities).



A small percentage of bulls do not respond to electroejaculation and will not produce a sample. However, in healthy normal bulls this is rare. A re-test of these bulls several weeks later often (but not always) will produce a sample.

If you wish to have a bull fertility tested the requirements are:

1. Make sure the bull has been kept away from females for 24 – 48 hours (to maximise the quality of the sample).
2. We need a crush with access at the side to collect the sample and enable examination of the penis.
3. We need somewhere dry with power where we can place the microscope and examine the semen. This needs to be done straight away after we have taken the sample.

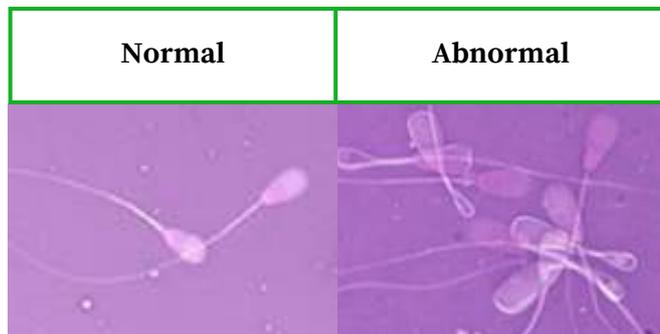


Image: Sperm cells under the microscope



Calf Pneumonia

Vet Tom Laycock

Bovine respiratory disease (or pneumonia) remains one of the costliest diseases in cattle around the world. According to AHDB, pneumonia costs the cattle industry around £50 million per year, with each case costing between £30-80.

Cattle are more susceptible to bovine respiratory disease than other animals because cattle use a greater part of their lung capacity for normal base level breathing and they are more at risk of exposure to viruses and bacteria that could lead to pneumonia. Their lungs are divided up into more individual sections (called lobules) than most other animals, this leaves their airways in these sections more at risk of being completely blocked. Leading to permanent damage which can have an effect on growth and milk production over an animal's life.

There are a few agents that act as primary infectious agents:

- IBR (Infectious Bovine Rhinotracheitis)
- BVDv (Bovine Viral Diarrhoea Virus)
- PI3 (Parainfluenza)
- RSV (Respiratory syncytial virus)
- Bovine Corona virus
- Mycoplasma

These on their own are rarely fatal (except, in certain circumstances with RSV), however, the damage they cause can create an environment that allows bacteria (*Pasteurella multocida*, *Mannheimia haemolytica* and *Histophilus somni*) to multiply. These bacteria can then cause serious and permanent lung damage.

Image:
Ensure bedding dry, clean and deep enough to cover calf legs for warmth





Calf pneumonia continued ...

Effective treatment for pneumonia is achieved by rapid diagnosis and effective treatment. However, there are often delays in identifying disease due to:

- As prey animals, cattle are very good at concealing disease.
- A low level of chronic pneumonia often being seen as acceptable.
- Identifying sick animals based on clinical signs. This has been proven to be inaccurate (one study showed only 62% of calves were accurately diagnosed).

One study showed that 37% of animals culled at an abattoir that had no history of pneumonia (neither clinical signs recorded nor any treatment administered) actually showed significant lung damage - enough to reduce the growth rates and performance in terms of yield and fertility.

From a farmer point of view, **the most important tool on your farm is a working thermometer.** Having a regular update on the calf's temperature would reduce the reliance on monitoring clinical signs as a raised temperature, i.e. above 39.4°C, is known to be one of the first signs of pneumonia.

Options for more regular monitoring would include:

- Temperature monitoring bolus
- Temperature monitoring ear-tag
- Identifying the at-risk age on farm when calves are most likely to get pneumonia and take the temperature animals through that age period via a rectal thermometer, irrespective of clinical signs.

A simple rule to follow is: if the temperature is 39.3-39.5C then administer a non-steroidal anti-inflammatory drug (NSAID, i.e. Metacam) and monitor the animal for other clinical signs. Then take its temperature daily over the next few days and monitor results.

Other clinical signs to look out for include:

- Snotty nose
- Rapid/difficult breathing
- Rapid heart rate
- Dull demeanour
- Reduced feeding

If the animal's temperature is 39.6C or above, or showing clinical signs, then administer an NSAID and antibiotic (talk to your vet for the appropriate drug for your farm).

The sooner treatment is administered the quicker the animal will recover and so reduce the risk of permanent lung damage.

Prevention is always better than cure. Having an objective and systematic look through the whole calf and youngstock enterprise with your vet would be beneficial to this end.

Key areas to look at are:

- **Housing** – Are they comfortable in the environment that they live in? Are the calves cold? Is there a breeze? Is there protection for calves on a cold day to regulate the temperature around them? Are their hairs standing on end or does their face look fluffy? Is there a smell? – i.e. ammonia. Is there enough ventilation? - Cobwebs? Bedding - Is it dry/clean?
- **Feeding and water regimes** - Are they getting enough often enough?
- **Colostrum management** -
 1. Quality
 2. Quantity
 3. Timing.
- **Causative agent diagnosis** - Swabs, Bloods, post mortem examination
- **Vaccination** – Based on diagnosis, give prior to usual onset time on farm (no vaccination is 100% effective but should reduce the severity of cases and number of cases).
- 4. **If seasonal** (i.e. most farms from October -April) make sure all at risk animals are fully vaccinated at least three weeks prior to this period to give them maximum protection.
- 5. **If by age** i.e. pre/post weaning, aim to have vaccinated prior to the risk period.

Bovine respiratory disease is a costly condition which, if allowed to proliferate, can cause serious and long-lasting damage to stock and to the farms profit margins. Therefore, doing everything possible to limit disease is essential. If you have any questions about this topic, please talk to your vet.

Image: Heifer calf with chronic pneumonia (Stretched neck, poor growth and 'fluffy' appearance).





Service costs update

Business Director Paul Neilson

As a collective team we want to thank our Clients for their encouragement and support since we started in October 2021. The economic situation remains difficult to manage and the rapid cost increases since March appear to have no prospect of abating in the near future. We talk regularly with our supply partners to try and secure products at competitive and stable prices. In recent months, a few products have had significant increases, sometimes with very little notice. We try to advise you of these and of special offers.

Our Service costs are a real challenge. We have not increased our prices since setting them on 1 October 2021. We have absorbed the increases since earlier this year but see them continuing for the foreseeable future. Regrettably, after careful review, I confirm that some of our Service costs will increase at below Inflation rates from 1 October 2022. The Vets will discuss these with you over the next weeks.



Medication updates

Practice Manager and
RAMA/ SQP Fo Jones



Kexxtone

**Offers
available!**

Please call for more information

Back in Stock :

Alamycin La 300 now in stock

Engemycin 100ml in stock

Calciject no. 2 and 5 in stock

Heptavac P - 50ml and 100ml in stock



Out of Stock:

Chronogest Sponges - Out of stock

Footvax - Out of stock (MSD)

PMSG - Out of stock (MSD)

Rispoval Intranasal single dose & 5 dose - Out of Stock, **25 dose in stock**, Alternatives available.

Toxovax update

All orders cancelled this season and out of stock until further notice:

- No other vaccine is licensed globally for toxoplasmosis.
- We can prescribe in-feed medication for high-risk situations, but expensive and not necessarily effective!



See you at the Christmas Party

19:30, Friday 9th December - Stockland Village Hall.
Please RSVP by 2nd December for catering purposes.



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