

ISSUE 72 Winter/Spring 2021

Livestock NEWS

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ACHIEVING EXCELLENCE IN HEALTH AND PRODUCTIVITY

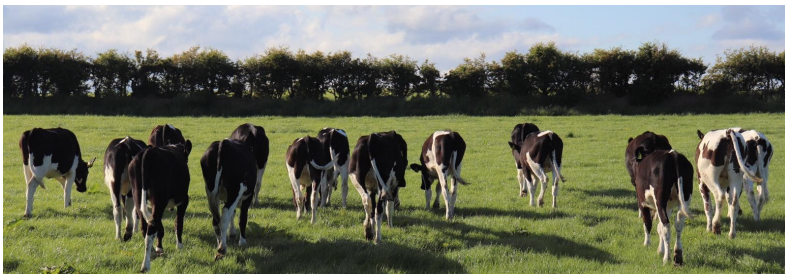
Staff News

We are pleased to be welcoming Charlie back from maternity leave on 23rd March. Charlie will be working Monday, Tuesday, Wednesday and Friday.



Youngstock Discussion Group

Rearing replacements is one of the biggest costs for any farm. We are looking for 10 enthusiastic farms to be involved in our new youngstock discussion group. Our aim is to exchange ideas and engage in discussions around the future of calf health in order to minimise losses, maximise the future potential of your herd whilst also reducing a farm's carbon footprint. Every farm will have at least one aspect of youngstock rearing that they could improve on and through this group we hope to cover all aspects from birth to calving to ensure that when a heifer calves down, she is ready to be productive and profitable. Topics will be based on what you, the farmers, want to improve your knowledge on and what better way to learn than learning from other calf rearer's with similar mindsets. The first meeting will be in April and it will be an introduction to give you more information on what the group will involve including farm walks, discussions on specific topics e.g. colostrum management, disease control, vaccination etc and increased monitoring of calf health parameters e.g. colostrum bloods, DLWG etc. If you are interested in being involved in this exciting new venture, please contact Karen McNeil at Dalston on 01228 710208.



Ensuring Survival of Newborn Lambs



Charlotte Pennington

Lambing time is fast approaching (or for some of you may be in full swing already!) Previous data has shown that almost 50% of the total lamb losses occur in the first 48 hours of life. This article discusses the main risks/causes of newborn lambing losses and simple tips to prevent them.

Difficult Birth

Lambs with difficult or delayed delivery can suffer from hypoxia (low oxygen) or swollen heads potentially leading to poor suckling or even death. Go back to basics when approaching a difficult lambing. Remember to wash your hands (and ideally wear gloves) before checking the presentation of the lamb. Correct any obvious abnormalities and make sure before you attempt delivery that all limbs and heads are from the same lamb! Assess the size of the lamb relative to the ewes pelvis. If in doubt never force the lamb through as this can cause rib fractures and severe damage to the ewe. If you have been trying for 20 minutes without any significant progress or have any concerns call for help!

Colostrum Intake

Colostrum is key - it provides both nutrition and immune benefits to the lamb ...remember the 3 Q's:

QUALITY – Optimal ewe health, condition and nutrition pre lambing helps her to make good quality colostrum. Always make sure ewes have plenty of water to drink around lambing time. If ewe colostrum is not available, cow's colostrum (from low johne's risk herd) can be a good substitute.

QUANTITY -

Lambs require at least 50mls/kg of good quality colostrum in the first 6 hours of life and a total of at least 200mls/kg in the first 24 hours.

QUICKLY - the level of antibody (IgG) in colostrum deteriorates quickly, especially after the first 6 hours, so ensuring it is given ASAP is essential.

Make sure you check if the lambs have suckled within the first 2 hours, you can gently feel the lambs stomach behind the ribs to see if it's full. Hungry lambs will have a hunched appearance.

Supplementary colostrum via bottle or stomach tube (if they are conscious and can lift their heads) should be provided to vulnerable lambs (such as weak/small/multiple lambs), those having had a difficult birth or where the dam has supply problems.

Hypothermia & Hypoglycaemia

Normal temperature of a lamb is 38.5-40°C. Hypothermia is low body temperature caused by excessive heat loss. 37-38°C is considered mild and <37°C severe. Wet and drafty conditions can quickly cause lambs to lose heat. Ensuring that the ewes/lambs are able to shelter from extremes of weather and temperatures is essential.

Hypoglycaemia (low blood glucose) can be caused by starvation. Low blood glucose means the lambs haven't enough energy to produce heat to keep warm. Lambs with low birth weights/difficult births etc are more vulnerable.

Hypothermic lambs should be moved to a clean, warm, dry environment. If they are unconscious or too weak to lift their heads, they must be warmed up slowly over a couple of hours before it is safe to feed them. The use of lamb jackets and heat lamps can help recovery. Hypothermic Lambs over 6 hours old have no fat stores to fall back on, therefore need supplementary Glucose (20% at 5-10ml/kg into the abdomen) in addition to warming before it is safe to stomach tube them with milk.

Poor Hygiene

Bacteria building up in the lambing environment can be harmful, potentially causing diseases such as navel ill and watery mouth. Ensuring good basic hygiene at all times can go along way to not only reduce the use of antibiotics use but prevent disease occurring in the first place.

Examples of good practice are:

- Prompt navel dipping asp after birth (10% iodine) and repeated until navel dry
- Thoroughly washing of shared equipment such as stomach tubes, feed buckets etc
- Isolating sick animals , disposing of afterbirths and wearing gloves and washing hands/overalls regularly
- 2sqm per ewe with twins stocking density
- Good ventilation, drainage of buildings, shelter from elements and clean bedding

Litter Size Management

Obviously litter size will affect survival with triplets naturally being smaller weights and requiring more potential interventions to help them. A lot of this has been discussed above but basics such as ensuring lambs are getting enough feed, ewes have enough milk and supplementing colostrum or removing lambs from the dam where appropriate should be considered to ensure everyone has enough food to go round.

Other Food For Thought

There are other factors that contribute to overall lamb health; however by the time lambing is full swing the damage may have already been done. Reducing newborn losses is not just about management at lambing time there are lots of things prior to lambing that should be considered:

Ewe Health

Poor condition late pregnancy and sub optimal nutrition in the weeks before lambing are major contributors of low birth weights and poor colostrum quality. Both disease control (parasite monitoring, routine vaccines, feet checks) alongside closely monitoring ewe nutrition (BCS, bloods etc) is essential. Don't overlook the benefits of simple things such as readily accessible fresh water and feed space. Without a healthy ewe it is harder to produce a healthy lamb.

Consider the use of blood sampling at key times e.g. 2-3 weeks pre lambing for metabolic profiles in the ewes to allow time to make any needed adjustments to their ration.

Genetics

Selection for good mothering traits and avoiding combinations that predispose to difficult birth are important.

Record Keeping

Good record keeping and planning. Recording simple data can go a long way to identify problems and this can be used to limit losses and plan ahead to prevent similar problems in the future. A simple tally chart of live and dead lambs is a good start point, but the more information you can record the better!

Is it time to double up?

Fertility is one of the main factors affecting the efficiency and profitability of any dairy herd. By regularly using data to analyse the performance of a herd, targeted improvements can be implemented and monitored. An important fertility performance indicator of an all year round calving herd is the 21 day pregnancy rate which is defined as the percentage of eligible cows which get pregnant in a given 21 day period of time. The pregnancy rate of a herd is calculated using the conception rate and submission rate. According to AHDB Optimal Dairy Systems, the top 5% of herds are able to achieve a pregnancy rate of >25% with the top 25% of herds achieving over 20%. 3 factors which can maximise submission rate are:

1. Control calving to first service interval
2. Implement accurate heat detection to ensure cows that are in oestrus are detected and inseminated promptly
3. Identify non-pregnant cows by regular pregnancy diagnosis and ensure cows identified as not pregnant are served within 10 days of examination



Shona Mouncey

Calving to first service interval can be improved by:

- Presenting cows which have not had a heat recorded during the voluntary waiting period to the vet to ensure that they are clean and cycling. This allows early detection of issues such as endometritis and cystic ovaries.
- Cows which have not been served by 65-70 days in milk should be presented to the vet for potential treatment to ensure they are served by 80 days in milk.

One method of ensuring cows are served within 10 days of examination is synchronisation using an Ovsynch program.

	Treatment
DAY 0 (At routine)	2ml GnRH
DAY 7 (e.g. 8am)	2ml prostaglandin (PG)
ADDITIONAL DAY 8 (8am = 24 hours later)	2ml prostaglandin (PG)
DAY 9 (4pm = 56 hours after 1 st PG)	2ml GnRH
DAY 10 (8am = 16 hours after GnRH)	Fixed time AI

Table 1: Ovsynch protocol

This program traditionally involves only 1 prostaglandin injection on day 7, but studies have shown that conception rate can be increased by giving a second prostaglandin 24 hours later on day 8. Timing of the second GnRH injection and fixed time AI remains unaltered at 56 and 72 hours respectively (after the first prostaglandin injection on day 7).

The corpus luteum (CL) is responsible for progesterone production. At the time of AI, progesterone production must be low whilst oestrogen levels must be high. Therefore, rapid CL regression is important to ensure low levels of progesterone at the time of AI. Prostaglandin is given to remove the CL. The reason a second prostaglandin injection increases conception rate is thought to be that the rate of CL regression improves. One study showed that CL regression increased from 83% to 97% at time of AI with a second prostaglandin injection.

One farm we work with has introduced this additional prostaglandin injection and has seen significant improvement in their confirmed pregnancies following synchronisation. The herd has 450 milking cows and calves all year round, with a 21 day pregnancy rate of 30%.

Farm protocols include:

- Any cow which has not been served by 70 days in milk is presented to the vet at the weekly fertility routine. Providing that the cow is clean vaginally and has a CL present, an Ovsynch program is started
- Any cows which do not have CL present, have a progesterone device added to the Ovsynch program for 7 days

- Any cows that are PD negative are put on an Ovsynch program
- All synchronised cows are presented 7 days later at the next routine to ensure a CL is present before prostaglandin is administered
- Cows are presented for PD from 32 days after service

Conception rate for a successful synchronisation program should aim to be within 5% of the herd's conception rate to standing heat. Ovsynch with a single PG injection was achieving a conception rate of 22% in cows compared to 43% to standing heat, and 42% in 1st lactation heifers compared to 49% to standing heat during 2017 – 2020. Therefore, a second PG injection was introduced to the Ovsynch program.

	Standing heat	Ovsynch - Double PG
Cows	43% (197/453)	39% (62/161)
1 st lactation heifers	51% (113/220)	55% (16/29)
Overall	46% (310/673)	41% (78/190)

Table 2:

Conception rates to standing heat versus synchronisation 2019 – 2020

As a result, the conception rate to the Ovsynch program increased to 39% in cows and 55% in 1st lactation heifers. Therefore, the introduction of a second prostaglandin injection on day 8 of the Ovsynch program has increased the overall conception rate to synchronisation, but especially in cows in their second lactation or more on this farm.

If you are interested in optimising your synchronisation program or reviewing your fertility performance please feel free to reach out to one of the team.

Surrey Students

The start of January saw the first set of students from Surrey University joining us to gain some practical experience prior to their graduation in the Summer. A lot of effort went into preparation for the students joining us, with a lot of emphasis and thought going into ensuring that the students would not increase the risk to our clients or staff with respect to coronavirus, and a robust testing protocol being put in place.

We welcomed 2 farm students (Alex and Becca), alongside a small animal and an equine student for a 3-week rotation. During this rotation they spent time on farm with our vets and vet techs, received a number of mini-seminar sessions on various topics from clinical exams and antibiotic usage to mentoring and sustainability, as well as performing a number of case studies during quieter periods. All of the students were delighted to be given the opportunity to get onto farm and start seeing some cases, and wanted us to pass on their appreciation to all of our clients who have kindly allowed them onto their farms, they found their time with us hugely rewarding in preparation for starting work as vets in the coming year, and the feedback on our staff, clients and practice has been really positive, so thank you!

Spectam

Spectam is an antibiotic used for the prevention and treatment of bacterial neonatal disease (e.g. watery mouth) in lambs.

There is evidence on some farms of resistance building up due to over-use, means that the treatment is becoming less effective.

To try and limit the build up of resistance on farm, Spectam should be targeted to triplets and weak twin lambs only.

If you have a large number of weak lambs or an outbreak of watery mouth please contact the surgery and speak to a vet.

Colostrum is liquid gold, making sure lambs receive 50ml per kg bodyweight of colostrum in their first 6 hours is the best prevention for watery mouth.



Upcoming Events

10th March - Mastering Medicines Course Via Zoom 12pm - 2pm

15th March - Spring Parasite control meeting Via Zoom 12.15pm - 1.15pm

**If you are interested in attending any of the above events please contact Karen McNeil/
Emily Tinning on 01228 710208 or Email: vettech@paragonvet.com**

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