



# WINTER FARM NEWS

December 2024

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## Greetings

With the year having flown past we find ourselves reflecting and looking forward simultaneously; silage analysis's have on the whole been poorer than we would hope due to the challenging weather we've experienced over the last year and this means extra thought needs to be put into diet rations for stock. As we approach Christmas and new year our thoughts turn to the preparation for lambing 2025; ewes need sufficient protein and energy in the diet in order to avoid problems like twin lamb and produce plenty of milk for strong healthy lambs. Formulating diets with this years silage could prove to be quite a challenge—please do not hesitate to contact us if you would like a little help with this. In other news we have had some successful sheep themed farmer meetings of late and would like to thank folk for coming along whether its been for the food, the social or to share an idea of two and we look forward to this continuing in the new year!

## Events and Reminders

### Mince Pies and Mulled wine night

Please come along to Sedgwick Cricket club on the 20th December for our Christmas social where there will be Christmas-y refreshments and raffle in aid of RABI.

### Medicines and Milksure courses

Dates and times tbc - contact the practice to register interest



*We often seen an increase in sudden deaths among stock around this time of year—if the carcass is relatively fresh (alive less than 24hrs ago) then post-mortem examination can yield useful information. Remember—Knowledge is power!*

## Disease forecast

As seems to be the theme for the year the unpredictable weather means that **pneumonia** remains likely. Prevention is always the best cure and with a array of pneumonia vaccines available for cattle there is plenty of options to fit individual farms whether it be with intranasal versions or injectable. As temperatures remain mild, **worms** can still survive on pasture and could present a problem to young or ill thrifty sheep. Monitoring faecal egg counts of lambs and shearlings to ensure that parasite burdens are not holding them back is a cheap intervention that could help avoid bigger problems later on. Thankfully, the number of new haemonchus cases have reduced lately probably due to the colder weather and the worms need for relatively warm temperatures. That doesn't mean that the risk is entirely gone though—bought in sheep could still be a source of infection through the winter as the worm survives in the sheep over the colder months ready to strike the next year. Developing and following popper quarantine procedures to reduce the chance of bringing harmful or resistant parasites onto your farm are crucial to protect your flock. As the mild weather also favours immature fluke survival on pasture, acute **Fluke** infection causing sudden deaths could continue to present a challenge into the new year as well as the more typical back end challenge of chronic fluke which tends to cause ill thrift, weight loss and bottle jaw. **Scab** is also likely to re-emerge this winter with many people reporting resistance to injectable treatments. If you are concerned regarding scab in your flock, please talk to one of the farm team for advice on control and treatment.

# Controlling Cryptosporidium in Beef Cattle

Tackling a persistent threat

Ben Harvey

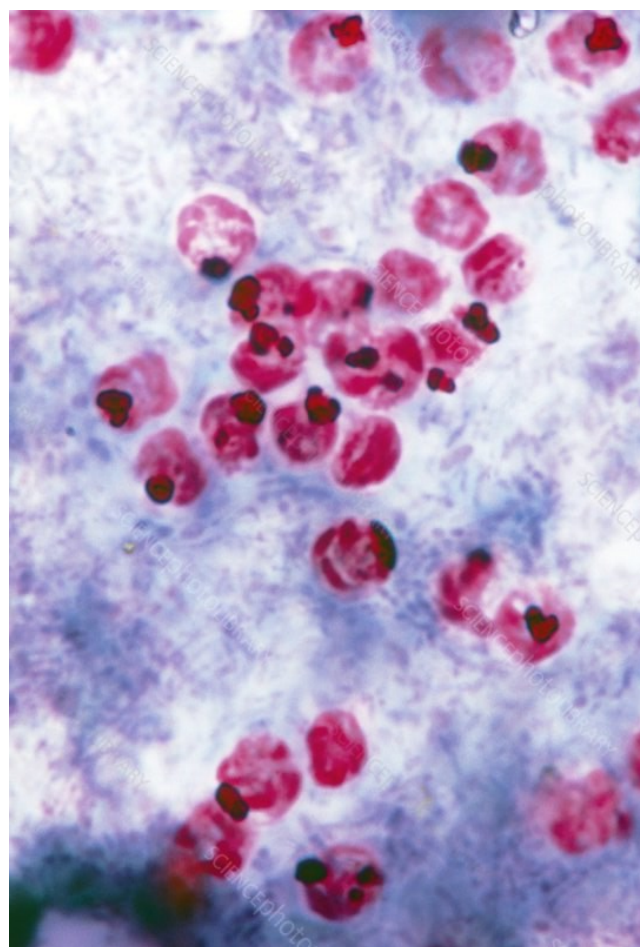
Cryptosporidium, a microscopic protozoan parasite, is a significant cause of calf diarrhoea in the UK. This disease, known as cryptosporidiosis, primarily affects calves under six weeks of age, causing substantial economic losses through reduced growth rates, treatment costs, and mortality. Controlling cryptosporidium requires a comprehensive approach, including hygiene measures, targeted treatment, and innovative prevention strategies, including a newly available vaccine.

## How Cryptosporidium Spreads

Cryptosporidium is highly contagious and spreads primarily through the ingestion of infective oocysts shed in the faeces of infected animals. These oocysts are remarkably resilient, surviving in the environment for extended periods, especially in moist and shaded areas.

Infected calves shed millions of oocysts into their surroundings, contaminating bedding, feed, water, and equipment. Oocysts can also be spread through human activity, wildlife, and contaminated boots, clothing, or machinery.

The high infectivity of cryptosporidium means that even small doses of oocysts can lead to infection, particularly in young calves with immature immune systems. Stress factors such as overcrowding, cold weather, and inadequate nutrition can exacerbate the disease's impact.



## Source of infection

The primary source of infection is the contaminated environment, including calf pens, pastures, and shared water sources. Older cattle and asymptomatic carriers may also shed oocysts, perpetuating environmental contamination.

In addition to direct contact with infected animals, cryptosporidium can contaminate water supplies, making it a risk not only for livestock but also for humans. This zoonotic potential adds urgency to implementing robust control measures.



## Clinical Signs of Cryptosporidiosis

Cryptosporidiosis primarily causes diarrhoea, often yellow or watery, in calves aged 1-3 weeks. Other signs include:

- Dehydration.
- Weakness and lethargy.
- Poor appetite and weight loss.

While mortality is relatively low in uncomplicated cases, secondary infections, such as bacterial scours, can significantly worsen outcomes. Even after recovery, affected calves may experience stunted growth and poor performance.

## Treatment Options

Once cryptosporidiosis is diagnosed, treatment focuses on managing symptoms and supporting the calf's recovery.

### Rehydration Therapy

- Oral rehydration solutions or intravenous fluids are critical for combating dehydration caused by diarrhoea.
- Electrolyte replacement helps maintain essential bodily functions.

### Antiprotozoal Treatment

- Halofuginone is currently the only licensed treatment for cryptosporidiosis in cattle in the UK. Administered orally, it reduces oocyst shedding and alleviates symptoms but does not eliminate the parasite entirely.

### Supportive Care

- Providing high-quality colostrum during the first few hours of life is crucial for building immunity.
- Ensuring calves have access to clean, dry bedding and stress-free conditions aids recovery.

## Prevention Strategies

### 1. Hygiene Management

- Thoroughly clean and disinfect pens, feeding equipment, and water troughs between uses.
- Use suitable disinfectants e.g. hydrogen peroxide or ammonia-based products
- Avoid mixing age groups to avoid spread from older animals to younger, vulnerable calves.
- Regularly inspect calves for early signs of diarrhoea and isolate affected animals to reduce the risk of spread.

### 2. Environmental Control

- Provide clean, dry, and well-drained bedding to reduce oocyst survival.
- Rotate grazing areas to avoid contamination hotspots.



### 3. Colostrum Management and feeding protocols

- Feed adequate, high-quality colostrum within the first six hours of life to boost calves' immune systems.
- Monitor colostrum quality using a refractometer and store it properly to preserve its efficacy.
- Use individual feeders to prevent cross-contamination.
- Avoid feeding milk replacers or water contaminated with faeces.

## The New Vaccine: A Promising Development

A new vaccine against cryptosporidium has recently become available in the UK, offering an additional tool for disease prevention. This vaccine, targeted at beef and dairy calves, is designed to reduce oocyst shedding and the severity of clinical disease.

### How the Vaccine Works

Administered to pregnant cows, the vaccine enhances the antibodies in colostrum, which are then passed to the calf through early feeding. This approach boosts the calf's ability to combat cryptosporidium during its most vulnerable weeks.

### Benefits of the Vaccine

- Decreases the intensity and duration of diarrhoea in infected calves.
- Reduces environmental contamination by limiting oocyst shedding.
- Complements other management strategies, creating a more robust defence against the parasite.
- Vaccination should be part of an integrated herd health plan, with veterinary guidance on timing and administration to ensure optimal results.



# TBAS VISITS

Funded visits to help protect yur herd from the threat of TB

Charlotte Havercroft

The TB advisory service offers free visits to discuss TB risk on farm, and offers four simple cost effective, practical recommendations based on the risks identified. This can range from reducing risk from buying in, reducing risk to and from wildlife, stopping spread between cattle if it is identified in the herd etc.

The TB Advisory Service has been running for 4 years, funded by the rural development program for England (RDPE) 98% of Farmers that had a free farm visit said the recommendations at the end were useful and 90% rated the service as excellent.



Defra is now funding the TB Advisory Service for the whole of England, previously it was only available for farmers in the high risk and edge areas. This new funding also allows those farming other TB susceptible species (camelids, deer, goats, pigs and sheep) to have visits not just cattle keepers.

If you would like to access the service either call the practice. Charlotte would come out and spend an hour or two, walking the farm, discussing TB risks and making recommendations. Then we come back in 6 months to see how you are getting on with the recommendations. There is even the ability to have a badger sett survey if this is one of the recommendations for the farm.

# FARM ASSURANCE AND MEDICINE USE

What you need to know for your dairy herd

Cara Hatfield



Farm assurance schemes are currently voluntary for dairy herds in the UK, but are a requirement of many milk buyers, with 95% of UK dairy herd currently being farm assured. Farm Assurance schemes outline a set of standards or certifications that ensure dairy farming practices are carried out sustainably, ethically, and in accordance with regulations for animal welfare, environmental protection, and food safety. This system provides assurance to consumers that the dairy products they buy are produced under conditions that meet high standards.

Farm assurance typically involves:

1. **Animal Welfare:** Ensuring that the dairy herd is treated humanely, with appropriate care, housing, and medical treatment. This includes measures to prevent cruelty, such as providing adequate space, clean bedding, access to clean water, and proper nutrition. It also covers health monitoring and disease prevention practices.
2. **Food Safety:** Adhering to hygiene and food safety protocols in milk production. This ensures the milk is free from harmful contaminants and pathogens. Practices such as regular testing for antibiotics, proper milk storage, and clean milking equipment are part of this assurance.
3. **Sustainability:** Encouraging practices that minimise the environmental impact of dairy farming. This could involve managing manure, reducing waste, conserving water, and promoting biodiversity. Sustainable feed practices and reducing greenhouse gas emissions are also key components.
4. **Traceability:** Implementing systems that allow the traceability of milk from farm to final product. This allows consumers to know the source of the milk, ensuring transparency in the supply chain.

**Standards and Certification Programs:** As a dairy farm, you may participate in certification programs, such as the **Red Tractor Assurance** in the UK, which often include third-party audits and inspections to verify compliance with standards.

Farm assurance programs help promote good practices in dairy farming while reassuring consumers about the quality and ethical standards behind the milk they purchase. It also benefits farmers by offering access to premium markets that prioritise certified products. Farms that are assured, are considered lower risk by governing bodies and are therefore likely to have fewer government inspections.





## Medicine use in Dairy Cattle

Medicine use in dairy herds is essential for maintaining the health and productivity of the animals. However, it is highly regulated to ensure the safety of both the animals and the consumers of dairy products. Responsible medicine use includes appropriate treatment, monitoring, and strict adherence to withdrawal periods to ensure that milk is safe for consumption.

As vets, we assess the herd's health needs

and recommend appropriate medications based on specific illnesses, the cow's stage of production (lactating or dry), and the risk of disease. To be able to administer prescription only medicines (POM-Vs) or veterinary medicinal products under the cascade, we are required to carry out a clinical assessment of the animal and the animal must be under their care. This means, we have been given and accepted, responsibility for the health of an animal (or a herd, flock or group of animals). Responsibility for an animal may be given by the owner, client or keeper, statute or other authority. To legally have animals under-our-care, we must have seen the animals at least once, during a twelve-month period.

### Types of Medicines Commonly Used

- **Antibiotics:** These are commonly used to treat bacterial infections, such as mastitis and pneumonia. However, antibiotics must be used responsibly to avoid antibiotic resistance.
- **Anti-inflammatory Drugs:** These are used to reduce inflammation, pain, and swelling.
- **Vaccines:** Used to prevent infectious diseases such as Bovine Viral Diarrhoea (BVD) and Infectious Bovine Rhinotracheitis (IBR).
- **Wormers (Anthelmintic Medicines):** These medications control parasitic infections like worms, lice and mites.



## Medicine Residues

Regulatory authorities conduct regular residue testing to ensure that milk and meat from dairy herds do not contain harmful levels of antibiotics or other medications. If residues are found, the affected milk or meat may be rejected, and the farm may face penalties or suspension from milk supply chains.

### Record Keeping

As farmers, you must maintain detailed records of all medicine use, including:

- **What medicine was used.**
- **Dosage and method of administration.**
- **The date of administration.**
- **Withdrawal periods.**
- **Affected animals.**

This ensures traceability and accountability, which is crucial for both food safety and regulatory compliance. Responsible medicine use, proper record-keeping, and adherence to withdrawal periods are needed in order for dairy produce to meet the high

### Antibiotic Stewardship

There is an increasing focus on the prudent use of antibiotics to reduce the risk of antimicrobial resistance (AMR). Antibiotics should be used as little as possible but as much as necessary to maintain good animal health and welfare and farmers are encouraged to follow guidelines for proper use.

Many assurance schemes require farms to have protocols in place for antibiotic use and offer training on best practices for responsible medicine administration.

## Medicine-Hub

Until recently, no national system to collate antibiotic use in cattle and sheep in the UK existed. Medicine Hub was launched in 2021 by AHDB following collaboration with the farming industry. It is a voluntary initiative to gather and collate antibiotic use data from dairy, beef, and sheep enterprises in the UK, but may well in the future become a requirement of farm assurance schemes. By using this recoding system for farm medicine use, it will help to demonstrate the responsible use of medicine in the dairy, beef and sheep sectors and by doing so, build a reputation with customers helping to maintain current export markets as well as developing new ones. Furthermore, It will support the livestock sector to meet RUMA antibiotic use targets for 2024 and enable the UK meet EU requirements for national antibiotic reporting for cattle by 2024 and sheep by 2027.

All of our team are registered with Medicine-Hub and are happy to assist you with using the programme. In the New Year, we will be holding a farmers meeting on the programme, which we hope will answer any questions you have and aid in helping you get up-and-running with this data base.





# AN INTERESTING CASE

Tips for housing ewes

Charlotte Havercroft

Last month, whilst on a TB test, I came across an interesting case ... a lame 5 month old calf. Which doesn't sound so interesting at first! Talking to the client, he described the calf as becoming stiffer and stiffer on the leg until present day where it was non weight bearing on its right hind leg. Watching this calf come through the race, it was swinging the back right leg and seemed unable to straighten it. When the calf came to standstill this leg was held out in hyperextension – almost as if someone had a rope around its ankle and was hoisting it to look at the foot. This Angus cross calf was physically healthy and well muscled everywhere else apart from the leg in question. Observing the calf and the way it walked, this was no traumatic injury and I thought – could this be **spastic paresis**?

Spastic paresis is a progressive neuromuscular disorder that causes spastic contraction of the gastrocnemius or quadriceps, resulting in hyperextension of one or both hind limbs.

It usually develops within the first 6 months of life and can be subtle at first. As the animal ages, the gastrocnemius muscles gradually contract. The hock and stifle joints become increasingly extended. Over a period of months, the hind limbs become so stiff that the animal walks with short, pendulum-like steps. If only one limb is affected, the animal stands with the affected limb camped back and the unaffected contralateral limb held toward the midline to maintain balance.

*So could anything be done?*

I took a video of this calf and popped it on a group chat with vets across the company in the UK. There were multiple replies agreeing with my diagnosis and offers of advice on the surgery. In order to try to fix the cow, a **neurectomy** was required.

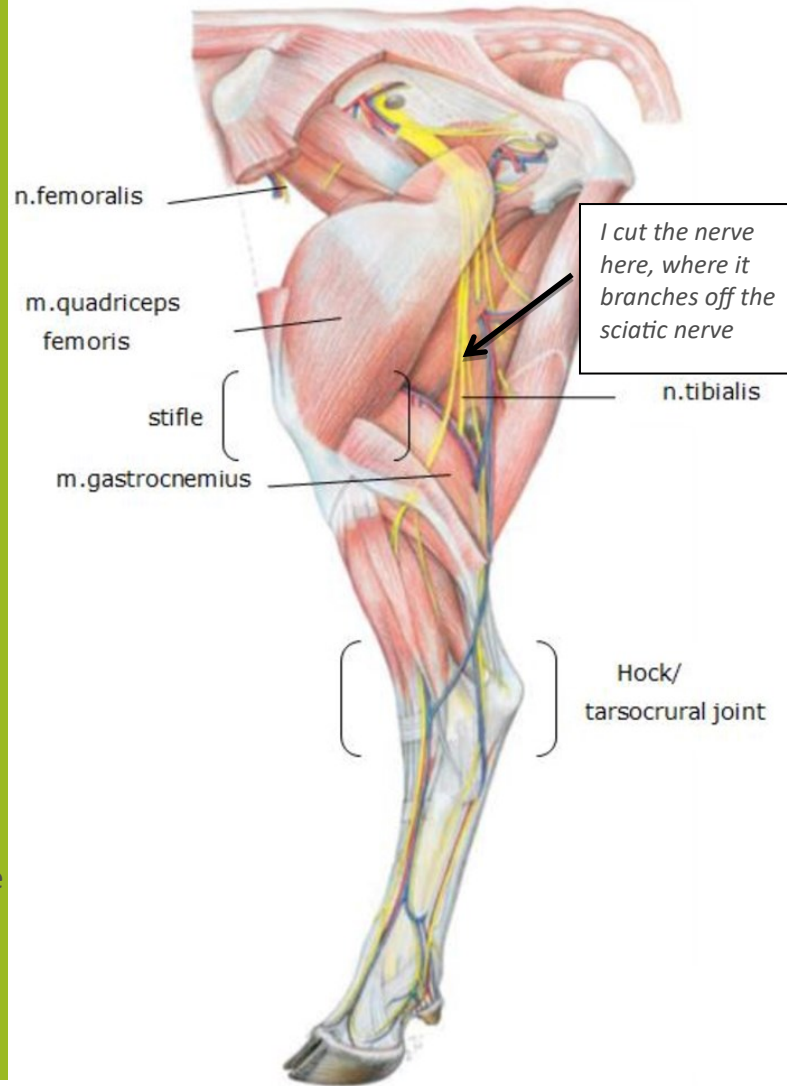
Because the nerve is causing unwarranted contraction, we cut this nerve to allow the muscles to relax. It is a relatively simple surgery in that, we go in and cut a nerve. But finding the nerve and cutting at the right location is the difficult bit!

With no-one at Westmorland farm team having done the procedure (often a referral centre surgery!) I received advice and videos from colleagues at other vet practices. Their material helped greatly and I also went to Robinson Mitchell who kindly let me practice on a few cadaver calves.



### *The Surgery*

As anticipated, the most difficult bit of the surgery turned out to be the sedation and anaesthesia! The calf was a little older than ideal – it was heavier and harder to handle (ask me about it getting to the x-ray room and I'll tell you the funny story!) but we got it sedated and we set off with the surgery. It went very well and when I cut at the location of the proximal most part of the tibial nerve: the leg flexed – the sign we wanted to see that I had cut in the right place! Watching the calf come round I could see it gently bending its leg for the first time. The surgery itself is highly successful with studies reporting 88% and upwards success, the main obstacles being the age of the calf and weight as the older the animal is, the more weight going through the leg as it readjusts to weight bearing which can cause muscles to snap as they stretch again.



The calf was sent home with strict instructions for bed rest with limited room for movement. In just under a week I went to see it again and it was already tentatively weight bearing again on that leg! As it stands, the calf is still recovering – it will be a long road to building the muscle on the leg again but if it continues then it will be able to be reared successfully rather than euthanized as the condition would have deteriorated until it couldn't stand.

# SURVIVING WINTER

Tips for housing ewes

Bethany Collins



Housing sheep in the run up to lambing can have many benefits and draw backs, as can leaving ewes outside. The 'correct' choice will vary from farm to farm and depends upon availability of suitable buildings (or conversely suitable lambing fields), the breed(s) of sheep, disease challenges and the shepherd's preferences. Although working in a dry and well set up lambing shed is arguably preferable to braving the thrashing rain, there are common problems that we encounter with housed sheep. Proper planning and a bit of preparation is always beneficial and will help avoid problems before they happen, helping to ensure a better lambing time and a more productive (and ultimately profitable) sheep enterprise.

## Space requirements

Insufficient feed space means that ewes have to compete for feed and are more likely to suffer from metabolic disorders such as twin lamb and vaginal prolapses.

Type of ewe	Concentrate feeding	Ad lib roughage feeding
Large (90kg)	60cm	20cm
Medium (70kg)	50cm	20cm
Small (50kg)	40cm	17.5cm

*A rough rule of thumb if using a building with standard size bays (4.8m) is ten medium sized ewes or eight large ewes, will be able to feed along the front.*

Type of ewe	Bedded (m <sup>2</sup> )
Large (90kg)	1.4
Medium (70kg)	1.2
Small (50kg)	1.1

Floor space for lying down is also important and should not be overlooked, overstocking can cause a multitude of problems and will exacerbate problems with infectious disease. Ensure plenty of space for ewes and that the environment is kept hygienic with plenty of fresh bedding.

## Ventilation

As with all animal housing, adequate ventilation will help keep air in the shed fresh and remove airborne pathogens. A poorly ventilated building leads to a humid, damp environment which will increase the amount of bedding needed to maintain hygienic conditions. Poorly ventilated animal housing is easily spotted if you know the tell-tale signs; build-up of dust and dirt on the underside



of the roof sheeting and lots of cobwebs are commonly seen if there is not enough air movement. Where ventilation may be compromised, it is important to carry out the necessary modifications to correct the problem. These could include improving inflow of fresh air by increasing inlet spacing or removing sheeting from an adjacent building to improve airflow.

## **Nutrition**

Good ewe nutrition is fundamental to the productivity of a sheep enterprise as ewe performance, and subsequently lamb performance, is directly affected. Ewe requirements change throughout the year. The most cost effective way to meet the nutrient requirements of ewes is to maximise the use of forage to reduce the reliance on more expensive concentrates. When ewe's nutrient demands are high in late pregnancy, the best quality forage should be offered to promote forage intake and reduce the need for supplementation. To be able to do this effectively forage analysis should be undertaken of any forages that are intended for feeding. From this information rations can be planned that will fulfil both the energy and protein needs of the ewes so that lambs are stronger and more viable, have increased survival rates, get enough good quality colostrum and milk to optimise their growth rates and ultimately optimise the weight of lamb weaned per ewe put to the tup.

### **Management tips at housing**

- Ensure sheep housing is thoroughly cleaned out well in advance of planned housing date  
Check buildings, barriers and gates and carry out any repairs that are needed
- Water troughs should be cleaned and checked for leaks. The optimal height for drinkers is 600ml from floor level
- Avoid housing sheep when wet – wet fleeces can take up to a week to dry out properly after housing which leads to high humidity in the shed which can lead to respiratory problems.
- Consider lameness control and develop a control plan with your vet; footbathing ewes before housing may be appropriate but if there is CODD or Footrot in the flock and it is not done well this can be an opportunity for lameness to spread rather than treating or preventing.
- In straw bedded sheds, ensure adequate straw is used to keep the environment clean and dry; if unsure you can use the kneel test – if your knees are wet after kneeling in the bedding for 10-30 seconds then the bedding is not dry enough.
- Consider shearing ewes at housing. Shearing housed ewes can reduce space requirements by 25% in late pregnancy, causes ewes to eat more forage (10-15%) which results in heavier lambs and better lamb survival and can also reduce problems with watery mouth as it helps reduce fleece soiling which lambs ingest when they search for the ewes teats. Remember that if ewes are shorn for housing, this must be done at least 8 weeks before turnout to ensure that there is suitable wool growth. Thin ewes should be left unshorn and the sheep housing should be draft free and well bedded if ewes are shorn.

# NEONATAL CARE IN CAMELIDS

Kathryn Stott

Camelids refer to the group of animals that include camels as well as alpacas and llamas. They are two-toed animals that have soft feet rather than hooves. They are pseudoruminants, meaning they have 3 compartments to their stomach as opposed to 4 like cows and sheep. Whilst we often treat them similar to ruminants there are a number of ways they differ. One of which is the care of their young, known as crias. Due to their delicate nature, care of new-born camelids is much more similar to that of a foal as opposed to lambs or calves.

The gestation period (length of pregnancy) in camelids can vary widely. The rough period is 330-360 days, with some pregnancies lasting over a year. This can make it difficult to know when a camelid is going to give birth, and due to the numerous risks associated with birth, it is highly advisable that a person be present to monitor the birth and be present for when the cria is taking their first drink. This makes breeding from alpacas and llamas a very stressful and tiring endeavour; even if there are only a few animals due to give birth.

When a cria is born, mothers do not lick the cria dry or stimulate it to rise/breathe. In the camelid's home land of South America this is not too much of a problem when they are giving birth during the warm summer. Unfortunately our British summers do not reflect this and crias can get cold very quickly, especially if born outside.



Colostrum from the mother is vital for the development of a young animal's immune system. Crias should be standing 1 hour after birth and be able to drink colostrum. Only 7.5% of crias achieve suckling on the first attempt. If a cria has not nursed within 6 hours of birth, intervention is necessary. The intestines of a cria are only able to absorb the important antibodies (IgG) within the first 24 hours after birth. This is due to the IgG molecules being larger than normal protein absorbed through the intestines. There are special holes in the intestine that allow these molecules to pass through, but these begin to close up 6 hours after birth, and by 9 hours after birth 50% of closure has taken place. A few hours after birth the stomach and intestine also begin being able to digest protein, meaning that the cria will be digesting the IgG rather than absorbing it, which removes the benefit to the immune system.

There are a few different things that can slow down/prevent how much colostrum a cria absorbs. Cold weather decreases cria vigour and therefore overall colostrum intake. Crias born by c-section have been shown to have reduced IgG absorption. A premature cria's intestines are refractory to IgG, that means the holes to absorb the IgG are unable to form and therefore the cria cannot absorb any antibodies. A premature cria can be hard to distinguish due to the varied gestation length. Crias are often labelled as premature due to their appearance at birth rather than the date they were born.



#### Signs of prematurity include;

- low birth weight
- floppy ears
- relaxed tendons in legs and angular limb deformities
- persistent slippers
- lack of dental eruption of incisor

Low birth weight can also be difficult to define as the weight of a normal healthy cria can range from 3.6-10.4kg. Crias will typically lose up to 0.5kg in the first 3 days. The crias should then gain 250g in the first 2 weeks, followed by 125-250g after that.

Unfortunately there is very little in terms of replacement options for colostrum in alpacas. Often the best solution is from another alpaca on your farm, but they would have to have given birth in the last 48 hours for it to have sufficient antibodies within it. Once the cria has passed the first 25 hours, there are milk replacement options available if the cria is an orphan or the dam does not have any milk. Pasteurised homogenised cows milk, pasteurised goats milk and commercial lamb and kid milk replacers are all possible options. If there is no other available source of colostrum available, or if the cria is unable to

absorb the antibodies (premature, born by c-section, over 24 hours old), the only possibility of giving the cria much needed antibodies is by plasma transfusion. This is done by taking blood from a donor alpaca (typically a male or non-pregnant female). This is then processed at the blood bank and returned as units of plasma. This plasma can be stored frozen for up to 5 years, and can be thawed when needed. The cria can be given a plasma transfusion via IV catheter from a vet, giving it the much needed antibodies to continue in early life. Crias that are lacking in sufficient antibodies are much more prone to neonatal diseases. These include navel ill, pneumonia, scouring and septicaemia.

At Westmorland Vets we conducted a plasma drive in alpacas during April 2023 allowing breeders to have frozen stores of plasma on farm in case of emergency. We have since given plasma transfusions in crias that are born premature or via c-section. **We will be arranging another plasma drive next year on 15<sup>th</sup> January 2025** to collect blood from healthy adult alpacas to make plasma for these crias. Due to UK law, only plasma harvested from that farm can be used on crias, so we cannot keep a communal plasma store. This means that if you would like to have some plasma stored for use in your crias in the future, please do get in touch and we can speak to you about the possibility of blood donation.

