SRUC Veterinary Services Monthly Report for January 2026

OVERVIEW

- ***Streptococcus ruminantium* as a cause of pneumonia in dairy calves and meningitis in a suckled calf**
- **Arthrogryposis and hydranencephaly due to Schmallenberg virus in a stillborn lamb in north-east Scotland**
- **Malignant catarrhal fever in a red deer calf**

DISEASE ALERTS

The following conditions were reported by SRUC VS disease surveillance centres in April 2025. Given similar climatic and production conditions, they could also be important this year.

Long bone deformity in suckled calves

This condition results in disproportionate shortening of the femurs and humeri. Hyperextension of the metacarpophalangeal joints can also be seen, and sectioning of the long bones reveals abnormal widening of the growth plates. Histopathology can be carried out to confirm chrondrodystrophy which can have a genetic, nutritional or unknown aetiology. In the case of long bone deformity, the precise aetiology remains undefined but feeding exclusively good quality silage during months four and five of gestation is a known risk factor.

Perforated abomasal ulcers in suckled calves

Perforation of an abomasal ulcer results in peritonitis and sudden death. Affected calves are most often between one and two months of age and are usually well grown in good body condition. This condition is usually sporadic and is straightforward to diagnose on postmortem examination. It is hypothesised that a repeated cycle of mucosal damage triggered by large intakes of milk may predispose to abomasal ulceration and perforation. If this is correct, then providing advice on how to reduce the wastage caused by this condition will remain problematic.

GENERAL INTRODUCTION

The mean temperature in January across Scotland was 0.7 degrees below the thirty-year average at 2.2˚C with significant snowfall across the north early in the month. It was another dull month with only 85 per cent of sunshine recorded when compared to the 1991 to 2020 average. Angus and Aberdeenshire experienced double their expected January rainfall but other areas were drier than average with an overall rainfall figure equating to 87 per cent of the thirty-year average.

CATTLE

Respiratory tract diseases

A dairy herd milking around 400-head reported the death of 12 calves from suspected pneumonia over the course of two weeks. Affected calves were generally less than three weeks of age and there was a poor response to treatment. The stockman considered that some had abnormal respiration from birth. Neonatal calves did not receive any routine vaccinations. The carcases of a 13-day-old British blue cross bull and a 16-day-old Holstein heifer calf were submitted for investigation. Both had stopped drinking milk 48 hours before being found dead. Postmortem examination identified areas of lung consolidation in both, plus multiple 1mm diameter necrotic lesions within the renal medulla. PCR testing of lung detected bovine respiratory syncytial virus (RSV) and bovine parainfluenza virus (PI3), and histopathology confirmed viral pneumonia with secondary bacterial infection. *Streptococcus ruminantium* was cultured from the lungs of both calves in pure growth and Gram staining of histopathology sections confirmed the presence of Gram positive cocci in association with the lesions of acute bacterial pneumonia. The renal lesions were considered to be a consequence of septicaemia. *Streptococcus ruminantium* is not commonly identified as the cause of respiratory disease but has been reported from cases of calf pneumonia.[1]

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The pluck from a five-month-old Jersey calf was received to investigate an outbreak of pneumonia with poor response to treatment. The calf had been treated with antibiotics, NSAIDs and corticosteroids over the course of four days before being found dead. There was bilateral anteroventral lung consolidation extending into the diaphragmatic lobes. A single emphysematous bulla was present in the left diaphragmatic lobe and the mediastinal lymph nodes were moderately enlarged. Cultures were sterile and PCR testing identified only RSV with a significant CT value of 18.7. Histopathology confirmed acute interstitial pneumonia with no evidence of secondary bacterial infection which was considered unusual.

A nine-month-old Limousin cross bullock was ill for three days and died after failing to respond to treatment. It had been purchased in a group of 15 a month before, and the farmer suspected that routine respiratory pathogen vaccination on arrival had been missed. One other animal had been ill and recovered. Postmortem examination confirmed pneumonia as the cause of death. There were no significant findings on routine bacteriology, but PCR testing of lung identified RSV and *Mycoplasma bovis*. Body condition was adequate however large numbers of adult *Fasciola hepatica* were found in the liver (Fig 1). It was advised that faecal samples from other animals in the group should be checked for liver fluke eggs.

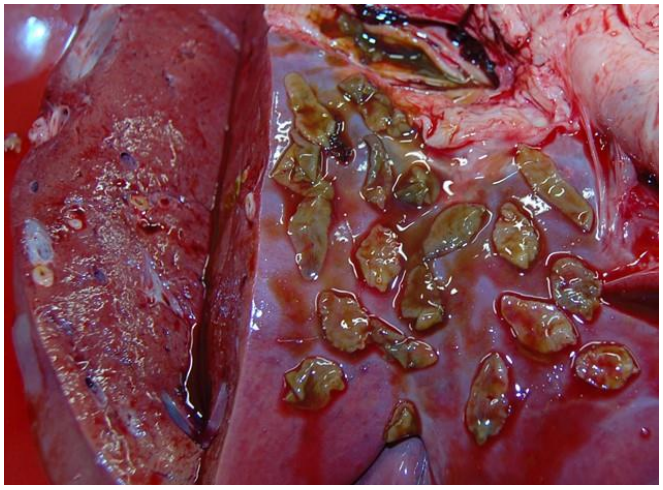

Figure 1 – Adult *Fasciola hepatica* and associated thickened bile ducts in the liver of a nine-month-old purchased bullock

Reproductive tract conditions

A bovine foetus was submitted from a group of 60 stabiliser cross cows that had been grazing kale for around one month and were due to start calving in three months. *Campylobacter fetus* was isolated from the foetal stomach contents and further speciation confirmed the isolate to be *Campylobacter fetus venerealis intermedius*. Fertility in the cows was reported to be good, however too many heifers had scanned empty. Sheath washing the bull was suggested as a possible next step. Control measures were discussed including using young/virgin bulls with heifers, switching to artificial insemination, and the use of vaccine.

Nervous system disorders

A four-month-old Simmental heifer was one of several animals treated for suspected pneumonia. The group had been housed since November, and this was the only animal that failed to respond to treatment. It continued to deteriorate and became recumbent with vague, intermittent neurological signs reported. No evidence of pneumonia was found on postmortem examination, but the cerebrospinal

fluid (CSF) had a slightly turbid appearance. *Streptococcus ruminantium* was isolated from both the CSF and the brain and histopathology confirmed severe meningoencephalomyelitis with perivascular cuffing and numerous bacterial colonies. Gram staining confirmed Gram-positive cocci consistent with *S ruminantium* amongst the inflammatory cells.

Generalised and systemic conditions

A fourteen-month-old Limousin bullock in good body condition was found dead and submitted to investigate the cause. It was the only loss from the group. Multiple skin plaques measuring approximately 3 x 0.5cm were observed in the inguinal area. Internal examination found a 3cm purple mass attached to the peritoneum and a 30 x 20cm haematoma associated with the right kidney. Sectioning of the kidneys identified numerous 1cm diameter purple lesions throughout the parenchyma and similar masses were present in the frontal sinuses. Neoplasia was suspected and histopathology described a round cell tumour typical of lymphoma involving the kidney, skin and liver.

SMALL RUMINANTS

Parasitic diseases

A farmer reported that 20 per cent of 100 homebred lambs were dull, thin and unsteady on their feet. Half of the affected lambs were faecal stained. They had moved farm one month earlier and body condition was unremarkable at that time. It was acknowledged that grass availability had decreased, however the lambs had been supplemented with haylage for four weeks and hard feed for three. One lamb became recumbent and was euthanased for investigation of the problem. Postmortem examination found large numbers of *Dictyocaulus filaria* within the airways and 43,100 mixed *Teladorsagia* and *Trichostrongyle* spp were recovered from the abomasum. A further 52,000 predominantly *Trichostrongyle* sp worms were recovered from the small intestine and the strongyle egg count was 7250 eggs per gram (epg). Liver trace element analysis showed no evidence of deficiency. The field had been grazed by barren ewes in early summer and had been empty since suggesting that the worm burdens had been acquired on the previous holding. The lambs had last received an anthelmintic in October when monepantel was administered. Anthelmintic treatment and a post-drench efficacy test were advised. Autumn and winter is a useful time to undertake routine faecal egg counts to monitor worm burdens and would have avoided significant production losses in this case.

Alimentary tract disorders

Two ewe hoggs were found dead four days after being housed during snowy weather. On-farm postmortem examination revealed haemorrhagic abomasitis and *Listeria monocytogenes* was isolated from the submitted tissue. Histopathology confirmed acute suppurative abomasitis with intralesional Gram-positive bacilli consistent with *L monocytogenes*. The silage fed during housing was considered the probable source of infection.

Reproductive tract conditions

A bought-in Texel gimmer carrying an embryo transfer lamb aborted around one month before term. It was the first abortion from the group of 40 animals. Cultures of foetal stomach contents yielded a profuse growth of *Listeria ivanovii* which was recorded as the cause of abortion. It is important to investigate abortions in purchased ewes due to the risk of them introducing pathogens such as *Chlamydia abortus,* Campylobacter sp or Border disease to the flock. Ideally, they should be managed separately from when they arrive until after lambing.

A deformed lamb was submitted from a flock of 600 that had just started to lamb. Scoliosis, arthrogryposis of multiple fore and hindlimb joints, and hydranencephaly were apparent on postmortem examination. Skeletal abnormalities are not a feature of *in utero* infection with bluetongue virus and this possibility was negated in consultation with APHA. Schmallenberg (SBV) was considered a more plausible explanation and amniotic fluid tested PCR positive for the virus. Foetal fluids were positive for SBV antibodies. Schmallenberg virus damages the developing central nervous system of foetal lambs during the second month of gestation resulting in brain and spinal cord abnormalities and secondary skeletal malformations. The flock was situated in north-east Scotland and local experience suggested that losses were likely to be limited.

Nervous system disorders

Listeriosis was diagnosed in three housed adult goats with a history of unilateral absence of pupillary light reflex and menace response, pyrexia and seizures for 48 to 72 hours before death/euthanasia. Brain tissue was submitted for bacteriology and a moderate mixed growth including *Listeria monocytogenes* was isolated from one. No significant organisms were isolated from the other two, but *L monocytogenes* can be a challenging organism to culture. Neuropathology was carried out on fixed brain from two animals and revealed marked, multifocal to coalescing, non-suppurative meningoencephalitis with microabscesses consistent with a diagnosis of listeriosis.

Skin diseases

A farm visit was carried out to a 1000 ewe west coast upland farm to investigate skin disease affecting 25 per cent of a group of 440 Scottish blackface ewes. The other two groups, which used the same handling facilities were unaffected. Initially only a few sheep were affected but within a two-month period lesions were evident on 110 animals. Affected sheep generally had a single focal lesion on their ear tips, lips, nose or lower leg (Fig 2). Lesions from three affected animals were swabbed and a range of bacteria including *Streptococcus uberis*, *Streptococcus dysgalactiae, Staphylococcus aureus and Trueperella pyogenes* was isolated. Affected animals were treated with antimicrobials and the lesions resolved. Similar outbreaks of skin disease have been reported previously[2] and investigated by SRUC Veterinary Services, and detection of *Streptococcus dysgalactiae* is a common finding. The inciting cause in this case was not clear which is also consistent with previous reports.

Figure 2 – Ulcerative dermatitis in Scottish blackface ewe

MISCELLANEOUS

Generalised and systemic conditions

A group of 130 red deer hinds and calves was treated with moxidectin for suspected lungworm after coughing was heard. The group was being strip grazed and response to treatment was good, however a six-month-old calf was found dead one week later. Postmortem examination identified a

haemorrhagic enteritis and *Yersinia pseudotuberculosis* was isolated from the intestine. However, PCR testing of spleen proved positive for ovine herpesvirus-2 suggesting a primary diagnosis of malignant catarrhal fever (MCF). Histopathological examination of the intestines was hampered by autolysis but no pathology consistent with yersiniosis was seen. The hepatic portal areas were expanded by lymphocytic infiltrates typical of MCF. There were no sheep on the holding implying that airborne spread of virus was responsible for the infection.

References:

1 Okura M, Faruyama F, Ota A *et al.* Genotypic diversity of *Streptococcus suis* and the *S suis*-like bacterium *Streptococcus ruminantium* in ruminants. *Vet Res* 2019; 50:94 doi:10.1186/s13567-019-0708-1

2 Staton GS, Crosby-Durrani H, Roberts G *et al.* Novel ulcerative leg lesions in yearling lambs: clinical features, microbiology and histopathology. *Vet Micro* 2020:247; doi.org/10.1016/j.vetmic.2020.108790