

OVERVIEW

Neonatal IBR in suckled calves at grass Q fever as a cause of still birth in dairy heifers Neonatal lamb deaths as a consequence of clostridial enterotoxaemias

Malignant catarrhal fever in red deer and cattle

GENERAL INTRODUCTION

May was warm and dry compared to the 1991 to 2020 only

44 per cent of average rainfall. Sunshine figures amounted to 172.6 hours which was 95 per cent of average.



treated with imidocarb and were reported to be recovering. The change in management may have precipitated the outbreak if the cows were exposed to a high babesia challenge at a time when their immunity may have dipped following the housing period.

SMALL RUMINANTS

Parasitic diseases

A small flock of 90 ewes managed as one group reported that ten lambs had died in the four weeks since turn out. The carcase of a six-week-old Dorset cross lamb was submitted and noted to be faecal stained. Prior to this diarrhoea had not been observed in the group. The mesenteric lymph nodes were enlarged, and worms were visible within the intestinal content. The small intestines were washed out and approximately 31,700 predominantly *Nematodirus battus* worms recovered. Infection was patent with 2500 *N battus* eggs per gram faeces. Anthelmintic treatment was advised, and a disease alert was issue to veterinary practices in the area.

Generalised and systemic conditions

Clostridial enterotoxaemias caused the deaths of neonatal lambs during May. Three, four-to-five-day-old Scottish blackface lambs in the same field died after developing a haemorrhagic scour and two were examined postmortem. Both had milk present in the abomasum with emphysema and multifocal petechiation throughout the jejunum. Lamb dysentery was suspected and confirmed on isolation of *Clostridium perfringens* and detection of beta and epsilon toxins from the small intestinal contents. A clostridial vaccine had been administered to the ewes pre-lambing however a ZST result of 9 units (target >14 units) in one lamb confirmed failure of passive transfer. Blood from the second lamb was unsuitable for testing. A two-day-old Suffolk-cross lamb on a different holding died after a short period of recumbency during which it was initially rigid and then relaxed and floppy. Postmortem examination findings of pericardial effusion, mild lung oedema, renal autolysis and cerebellar coning suggested a diagnosis of pulpy kidney. Small intestinal contents tested negative for epsilon toxin, however focal symmetrical encephalomalacia was detected on brain histopathology confirming clostridial enterotoxaemia type D (pulpy kidney) as the cause of death. There was no evidence of hypogammaglobulinaemia in this case with a ZST result of 33 units (target > 14 units), however the ewes had not received a clostridial disease vaccine.

A three-crop Scotch halfbred ewe rearing two-week-old twin lambs at grass became acutely ill and recumbent with tachycardia, tachypnoea and pyrexia. Antibiotic and NSAID treatment was administered but the ewe died within an hour and the carcase was submitted for postmortem examination. A yellow, fibro-necrotic exudate extended from the pharynx to the proximal oesophagus. There were multifocal pleural adhesions in the left thorax and petechial haemorrhages on the parietal pleura. The airways contained an abundance of white froth and the lungs were dark purple, diffusely congested and oedematous. Further petechial haemorrhages were noted on the epicardium and renal cortex. Septicaemia was suspected but cultures were not diagnostic. Histopathology identified foci of acute necrosis and inflammation in cardiac and skeletal muscle confirming acute systemic disease and Histophilus somni was suggested as the likely cause. PCR testing of heart confirmed this to be the case. We are increasingly aware of *H* somni myocarditis and septicaemia in sheep however, as yet it appears to only cause individual losses.

Respiratory tract diseases

A two-week-old Valais blacknose lamb with a short history of respiratory disease was treated with antibiotics, corticosteroids and NSAIDs but was found dead unexpectedly. At postmortem examination the anteroventral portions of both lungs were firm, dark red and sank when placed in formalin. Bacterial bronchopneumonia was suspected but cultures were sterile. Histopathology failed to detect any evidence of infectious disease but identified large quantities of mucus within the bronchioles and alveoli. Airway obstruction was considered to be the cause of atelectasis affecting over 50 per cent of the alveoli, and centrilobular hepatocellular degeneration suggested that fatal respiratory compromise had occurred as a result. Two hypotheses were suggested as possible explanations for the accumulation of mucus increased viscosity or a primary ciliary dyskinesis, neither of which has been described in sheep. No further cases were reported, however blood samples from the dam and sire have been stored should further investigation be required in the future.

Musculo-Skeletal conditions

A flock experiencing annual issues with joint ill submitted an untreated two-week-old beltex cross lamb with typical clinical signs. Between 10 and 15 per cent of the 2022 lamb crop required treatment and in 2023 lambs from all groups were reported to be affected. Ewes lambed at grass and were then housed in individual pens for a short time. The submitted lamb had a visibly swollen right carpus as a result of septic arthritis which was also confirmed in the left elbow, carpus, hock and stifle. *Streptococcus dysgalactiae* was isolated and as expected was resistant in vitro to oxytetracycline. Crusting was noted around the ear tag



and tail ring and although there was no visible evidence of infection it is known that both sites are possible routes of entry for *S dysgalactiae*. Advice was given to use surgical spirit when tagging lambs and, as the organism can be isolated from vaginal swabs, to wear gloves for assisted lambings.

PIGS

Generalised systemic diseases