Croeso, this newsletter describes some of the more interesting cases received at the WVSC during March and April.

**Type 2 Ostertagiosis and coccidiosis** were the cause of severe diarrhoea and condition loss in a group of 35 housed heifers. They had been given a combined flukicide and wormer the previous autumn and had been housed since. Two of these heifers died, a third one presented for post mortem was euthanased after it became recumbent. At post mortem, the abomasal mucosa had a pronounced nodular appearance. Histology revealed a severe mucosal hyperplasia with glandular metaplasia and hypobiotic nematode larvae of *Ostertagia ostertagi*. Type 2 Ostertagiosis generally affects a small proportion of animals in a group, and is caused by the simultaneous development and emergence of inhibited larvae, ingested at the end of the preceding grazing season. In addition to the ostertagiosis, histology revealed evidence of intestinal coccidiosis causing damage to the crypts, and likely to be associated with *Eimeria alabamensis*, which was contributing significantly to the diarrhoea in this group.

**Traumatic reticulitis** was diagnosed in an adult cow from a 1,000 cow dairy herd. It had been TB tested the day before and was found dyspnoeic, with subcutaneous emphysema of the neck, before being found dead. At post mortem there was a large abscess anterior to the liver, involving the liver capsule and the reticulum, which extended through the diaphragm into the thorax. There was an abscess in the right ventral thorax affecting the right middle and caudal lung lobes. There was interlobular and sub-pleural emphysema affecting all lung lobes, as well as the subcutaneous emphysema that was observed before death. A fragment of wire was found in the reticulum, which may have initiated the lesions.

**Listeriosis** was the cause of neurological signs and death in two, six-week-old lambs, with six others affected in a flock of 300 ewes and lambs. Clinical signs included lateral recumbency, opisthotonus and occasional convulsions. Lesions were suspicious of clostridial enterotoxaemia but histology ruled this out. There was a subacute, necrotising, suppurative encephalomyelitis typical of listerial infection. The ewes and lambs were being fed fodder beet, the soil contamination could have been the source of the *Listeria* bacteria.

**Coccidiosis** was diagnosed in an outbreak of diarrhoea in lambs, where three died and 20 others were affected, in a group of 1,000 lambs in an
1,800-ewe flock. Ewes were lambed inside and then turned out into fields where they remained set-stocked for a number of weeks. Post mortem examination of one lamb revealed a severe necrotic and haemorrhagic enteritis but the coccidial oocyst count was only 100 oocysts per gram. Further carcasses were requested, and a second lamb with similar lesions had 1,197,000 coccidial oocysts per gram, with typical morphology of the pathogenic strain *Eimeria ovinoidalis*.

**Tick-borne fever (TB)** was implicated in an abortion storm in a group of 110 hoggets in a flock of 1,000 ewes. The group had been bought down from mountain pasture two weeks previously and had lost condition, and began to abort. The farmer claimed that a separate group of hoggets carrying twins, in a different field, were unaffected. Submissions from the affected group included a hogget carrying a rotten lamb and three aborted foetuses. Positive PCR results for TBF were recorded in spleen from the hogget and pleural fluid from one of the three foetuses. Blood samples from two other aborting hoggets were also PCR-positive. TBF is known to cause abortion in sheep, the reason why only this group were affected was not clear, but there may have been infected ticks present on the field where the hoggets carrying single lambs were placed.

**Chronic fasciolosis** was diagnosed in a three-year-old alpaca, one of two to die in a group of three. Fasciolosis was diagnosed as the cause of death of the first animal and the other two were treated with a flukicide, two weeks previously. At post mortem of the second case, the animal was found to be very anaemic but no adult flukes were seen in the liver or bile ducts. Histology did however reveal lesions consistent with severe chronic liver fluke infection with fluke eggs in bile ducts. The treatment was apparently effective in eliminating fluke from the liver but the animal had failed to recover sufficiently, and eventually died.

Unusual liver lesions (Figure 3, right) were seen in the liver of an ovine foetus where *Campylobacter fetus fetus abortion* was diagnosed by bacteriology. Prominent white circular foci were seen under the liver capsule – Figure 3, right.

**Cleft palate and hypogammaglobulinaemia** were diagnosed in two neonatal lambs that had been euthanased by the PVS. In all, 30 lambs were affected by dullness, watery mouths and failure to suck, in this inside-lambing 700 ewe flock. The condition of these lambs did not improve with various treatments and 25 had died. Post mortem examination revealed the skeletal abnormality (Figure 2, left). It was not surprising that there was a failure of colostral transfer. Investigations are ongoing to establish whether there was a hereditary component to this problem.

Histological reporting by Mark Wessels, Finn Pathologists.