

CALF PERFORMANCE DATA HIGHLIGHTS EARLY PNEUMONIA CASES ON WELSH FARM

Monitoring calf performance has been the catalyst for a Welsh dairy farmer to hone his management and improve calf health, growth rates and the bottom line.

For a Pembrokeshire dairy farmer, who wishes to remain anonymous, monitoring calf growth rates alongside his vet, Alex Cooper of Fenton Vets, flagged up some pneumonia issues early, allowing action to be taken.

Using the 'Calf Tracker' tool the farmer was alerted to the influence sub-clinical pneumonia was having on calf performance.

Calf Tracker monitors the growth and health of calves from birth to weaning, with the weights of calves being measured every couple of weeks using a weigh tape and recorded in the online application.

The farm started using Calf Tracker in September last year. In October, they started to see some pneumonia cases with three out of 15 calves affected (20% incidence). When cases started to increase in November, Calf Tracker quickly showed the impact respiratory disease was having on growth rates.

By the end of November calf numbers had increased to 33, and a further 10 calves had developed respiratory disease, increasing the total number of calves affected to 13 (nearly 40% of the group). By December it had hit 20 out of 33 calves (60% of the group)

PERFORMANCE LOSSES

Mr Cooper says: "With Calf Tracker you begin to appreciate how bad it is and the knock-on impact a few cases can have.

“In September and October, the average daily liveweight gain (DLWG) was 0.8kg/day, which was on target for the farm, but by November, the average DLWG was 0.49kg and by December 0.29kg/day.”

As soon as it was identified there was an issue, blood samples were taken and bovine respiratory syncytial virus (BRV) and parainfluenza type 3 virus (PI3V) isolated as the two pneumonia-causing viruses.

VACCINATION

Calves showing signs of disease were treated with antibiotics, and the remainder of the calves vaccinated with Rispoval[®] IntraNasal.

Vaccination rapidly reduced the number of new cases, so that by January there were only 2 new cases. By March the DLWG had recovered to 0.71kg/day.

Mr Cooper says: “Vaccination broke the pneumonia cycle, which meant as quickly as it came it was gone.”

MANAGEMENT

Alongside vaccination, Mr Cooper also decided to look at other management issues at the farm.

Blood samples were taken and a refractometer used to assess whether or not calves were receiving sufficient colostrum. Results up to December 2016 showed 84% of calves sampled had total proteins above 5.5g/dl, which suggests colostrum intakes were good.

Stocking density was also looked at and was decreased slightly.

Mr Cooper explains: “The calf shed is tacked onto the parlour and collecting yard. Because it is a coastal farm and the wind can blow, the temptation is to build fairly well sealed sheds. This compromises airflow on wind still days as no 'stack effect' is achieved, resulting in an overload of pneumonia pathogens in the shed.”

“While altering the calf shed is certainly a long-term goal it is costly, so, vaccinating calves and reducing stocking density has helped calves thrive in this compromising environment.”

Continuing to monitor calf performance through Calf Tracker, Mr Cooper then noticed a flattening of the growth curve in April this year in calves from birth to 30 days of age.

“When we looked into what this could be, we found that growth rates were picking up significantly after 30 days, possibly as more creep was being consumed,” says Mr Cooper.

So, at this point, Mr Cooper suspected it may be something to do with the milk feeding. Calves are fed on milk replacer and when he weighed out what the farmer thought was 1kg of milk powder, it turns out it was only 800g.

“This shows calves were being underfed by 20%, which explains why growth rates were not where they should have been in that first 30 days.”

Since May, the farmer now weighs out the milk powder and growth rates have returned to 0.79kg/day.