

SMARTER BEEF PRODUCTION FOR ALL, FROM ONE MAN'S WISE WORDS

"CALVES WITH GOOD RESPIRATORY HEALTH TAKE FEWER DAYS TO TARGET WEIGHT, MAKE MORE PROFIT AND CREATE HIGHER MORALE FOR FARMER AND THEIR TEAM"¹

If a wise person learns from their mistakes, but a smart one learns from other people's, then Hexham beef and sheep farmer Kevin Sparke wants to help other farmers become smarter. The incident from which he's been wise enough to learn, and is determined not to repeat in a hurry, was created by a mistaken assumption.

In the four-generation WR Sparke and Son family partnership, he runs 180 suckler cows and 700 ewes on 397 upland hectares (980 acres) at Little Swinburne Farm near Hexham. The cows are Limousin or Belgian Blue crosses with some dairy genetics in the background, bred respectively to Blue and Limousin sires. A first batch of 60 calves in February then the remaining 120 in May. The best February-born females are kept as herd replacements, with the rest of that group being sold either just weaned in November or as yearling stores the following February. Calves from the May batch are all housed for their first winter, then the best are sold in March, and the rest in May and August. Among March sales in particular, Kevin is striving for show winning quality with good length, clean lines, sound legs and feet, and good head width, for example.

At around 300m (1,000 ft) above sea level on an exposed location, the winter climate brings wild fluctuations, in particular between maximum and minimum daily temperatures, wind speed and direction. Early January especially is a predictable risk period for calf pneumonia, triggered by frequent daily temperature swings of 10 to 15 degree C, at the same time as high humidity.

Across all calf birth dates, a high priority is good weight-for-age and Kevin is well aware that the main threat to achieving this is pneumonia. As the 2014-15 housing period began, the calves he considered most at risk were given a single-dose intranasal vaccine against two of the most commonplace respiratory viruses, Para-influenza 3 virus (Pi3v) and Bovine Respiratory Syncytial virus (BRSv).² Surveillance on more than 2,500 samples from calves submitted by vets for analysis found 83% positive for Pi3v, and 76% for BRSv. The calves assumed to be most vulnerable and therefore selected for vaccination were smaller and later born. Less than three months later in early January, some classic signs of respiratory disease were observed. Under advice from vet David Parkins at Intake Veterinary Services in Hexham, antibiotic treatment was administered to affected calves, all of which, without exception, were those that had not been vaccinated. Despite being in close proximity, Kevin Sparke says that none of the vaccinated calves required treatment.

"Our assumption that smaller animals were more vulnerable was clearly a mistake," he says. "In addition to medicine costs and extra work involved in handling and treating calves, affected animals stopped growing for four to six weeks. When you're still paying out for feed but they're not putting on live weight, that's seriously bad news for margins."

There followed an urgent consultation with David Parkins and creation of a new pneumonia protection policy. Calves born indoors in February are vaccinated at nine days of age, with Rispoval® IntraNasal. Then pre-housing,



Wise words from Kevin Sparke can help other beef farmers be smarter.

those born at grass in May and any of the February group being overwintered get the same single-dose vaccine, which is licensed for use from nine days of age with three months' duration of immunity against the BRSv and Pi3v pneumonia pathogens.

According to David Parkins, the justification for pneumonia vaccination is more about performance gain to ensure calves have the best opportunity to hit target growth rates rather than just disease protection. So all his practice's clients with a history of poor calf respiratory health are advised to adopt a comprehensive best practice health plan. This involves ensuring all calves get enough colostrum within six hours of birth, well ventilated housing with dry bedding, and vaccine protection. "There is no doubt that calves with good respiratory health offer at least six clear advantages," he says: "Better feed conversion efficiency, fewer days and therefore less feed to target weight, less handling, more profit, lower antibiotic use, and higher morale for the farmer and their team."

For Kevin Sparke and family, these gains are critical to the beef herd's success. Whether selling potential show winning calves, or the majority as high quality store cattle, the aim is to do so when maximum margin can be realised between each animal's value and the costs incurred to date.

"We cannot afford stand-stills," he says. "Margins are difficult to achieve, so we need to protect them by eliminating mistakes, in particular by avoiding wrong assumptions. To our cost, we've proved there is no link between bigger size and lesser disease risk. The reality, of course, is that bigger animals are worth more. So financially, they are a greater risk, the longer you keep them."



Vet David Parkins from Intake Veterinary Services in Hexham says calves with good respiratory health offer clear advantages including fewer days to target weight, more profit and higher morale for farmer and their team.

1 David Parkins, 2015. Personal communication. Intake Veterinary Services, Hexham.

2 Zoetis , April 2015. Pneumonia pathogen surveillance. Data on file.