

Gaining Production Improvements through Genetics and Animal Health

Rumbletonrig
Climate Change Focus
Farm

Notes from meeting on 29th
May 2018

The ninth meeting of the Climate Change Focus Farm discussion group at Rumbletonrig looked at gaining production improvements through genetics

Genomics - A big step forward for the Scottish beef industry?

Eileen Wall – SRUC Researcher in Animal & Vet science

Genomics is a tool to be used to improve genetic gain. Current Estimated Breeding Values (EBVs) use information from pedigree, progeny and performance data. Genomics uses DNA markers in addition to pedigree, progeny and performance data to help select the best animals. Genomics increase the reliability of an animal's genetic merit and reduces the time between generations, accelerating improvement. The Beef Efficiency Scheme tissue sampling and data collection will help farmers to make better breeding and management choices and contribute to a more sustainable Scottish beef sector both environmentally and economically.



Mobile App for the Scottish Animal Health Planning System (SAHPS)

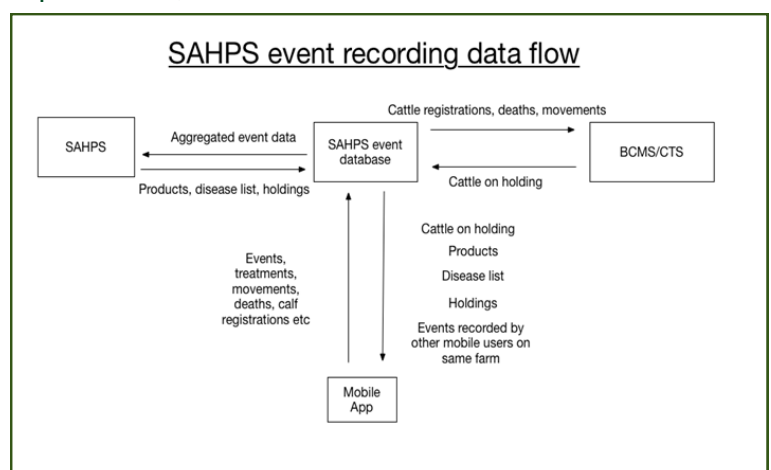
Foteini Manolaraki - SRUC Health Planning Development Manager

Health planning has been actively supported by Scottish Government since 2005 with the launch of the Animal Health and Welfare Management Programme. The rationale was to improve the contact between the farmer and his vet to support animal production, disease surveillance and animal welfare.

The challenge is to maintain a dynamic process for the collection and analysis of data in a way that is easy for the farmer to input and for both farmer and vet to access. The mobile app seeks to overcome the barriers of data entry by combining statutory requirements with production data gathered so that data is only entered once but is used for multiple applications.

No internet connection is needed outdoors when entering data. The system updates automatically to the SAHPS and BCMS/CTS once it is connected to the internet. For more

details visit the SAHPS website at www.sahps.co.uk or email foteini.manolaraki@sac.co.uk



Focus Farm meetings are free to attend and all farmers are welcome. Find us on Facebook or follow us on Twitter @SACFarm4Climate, or contact farm facilitator Donald Dunbar on 01835 823 322, email donald.dunbar@sac.co.uk for more information.

Farming for a Better Climate is funded by the Scottish Government as part of the Farm Advisory Service (FAS). The Climate Change Focus Farm programme is supported as part of its Veterinary and Advisory Services (VAS) legacy activities.

Measuring the Pelvic Area of Breeding Heifers

After experiencing several caesareans, John was concerned his closed herd might be producing heifers with a narrower pelvic area. So before turnout this spring the bulling heifers the farm vet manually checked their pelvic area. From the 75 heifers checked, 4 were removed for being small. Work from America also supports the rejection of very large pelvic areas as over time this will produce calves which have bigger hips.

Bull Paddocks

Keeping bulls in paddocks ensures they are fully acclimatised to grazing and get adequate exercise in advance of the mating period. However, several bulls in a single paddock can result in injury and a bull being out of action before mating even begins!

For several years, John has constructed individual bull paddocks using temporary electric fencing with water troughs filled by water bowser. He allows approx. 3/4 acre (0.3ha) per bull and his top tip is to provide an immovable object in each paddock for the bull to scratch against.

Wood Fines Bedding - How Well Did They Work?

Back in December 2017, a court of wood fines was compared with conventional straw. The court with 60 weaned calves was bedded with a 10cm layer of wood fines with further layers added every 10 days.

The load of wood fines lasted 7 weeks and the court was then mucked out and the same animals were then bedded with straw on a daily basis using a straw shredder. Table 1 compares costs between woodfines and straw.

Table 1. Cost comparison between woodfines and straw for bedded cattle.

	Cost/week	Cost/head/week
Wood Fines	£100	£1.66
Straw @ £50/t	£87.50	£1.46
Straw @ £130/t	£236.25	£3.94

John made the following observations on the wood fines:

- No change noted in the periods that cattle stood or lay down
- Animals ate approx. 1kg/head/day more of the wholecrop ration (approx. 5%)
- As time progressed there was a difference in the soiling of the animals legs and flanks
- It is a safer option for farmers who currently enter courts to bed with straw

Eating more of the forage diet resulted from the cattle not being able to eat bedding straw. Replacing low nutrition straw with a balanced diet should result in a slightly higher growth rate. It is also possible that the cattle are less heat stressed and have a greater appetite.

Further information on alternative bedding materials are contained in The Bedding Materials Directory which can be found at www.beefandlamb.ahdb.org.uk