MONTHLY
NEWSLETTER

EMBRACING TECHNOLOGY FOR ANIMAL HEALTH & IMPROVED PRODUCTION

Farm technologies have moved on tremendously in the last twenty years. Originally developed with a dairy focus, applications are now more widely available for **beef and sheep enterprises.**

Basic heat detection systems were a revolution when they first came out but now their use is more flexible, more integrated and user friendly. Now **Robotic Milking Machines, Automatic Calf Feeders, Footbaths, Silage Feeders** and **Slurry Scrapers** are now commonplace on our dairies.

ROBOTIC MILKING MACHINES

With significant financial investment, robotic milking machines can transform the efficiencies of our dairy herd. Cows love to be milked little and often, maximizing milk yields through improved feed intakes, generally improving mastitis risk, milk quality and fertility. Cows are generally very content and easy to work with. Sick cows are often identified early, especially if they miss a milking, lameness might be identified and treated promptly, offering a greater chance of cure.
Mastitis rates and milk quality also tend to improve, with little contagious mastitis spread with unit disinfection, and low environmental mastitis through good pre-milking teat preparation.

AUTOMATIC CALF FEEDERS

This technology has also improved a great deal in the last twenty years, calves can thrive on these systems. With uniformly mixed milk replacer and little and often feeding, encouraging calves to eat straw and ration, maximising growth rates. Together with controlled weaning, calves don't seem to be at the same risk of post weaning scours, due to healthy rumen function. However, it is essential that calf husbandry is first class when using these systems. There is a higher risk of spreading common contagious diseases like scour and pneumonia, if not managed correctly. Batch rearing is important, so younger calves don't mix with older ones and allow a build-up of viruses, bacteria and protozoa in the environment. Regular changing and disinfection of teats and tubes is also important, keeping them clean and working correctly. The feeders can be great at early identification of sick calves, with reduced feed intakes, it is essential that this information is used at least twice daily and acted on, otherwise treating sick calves may be delayed, reducing their chance of full recovery.

AUTOMATIC FOOTBATHS

Routine foot-bathing is important to manage lameness, especially the control of digital dermatitis. Footbaths are not effective treatments – lame cows must be identified early and treated individually, whatever the underlying cause. There are several benefits of automatic footbaths, labour saving, regular emptying and refilling with water or chemical. However, if they are not working correctly, a dirty footbath can cause more issues than it solves.

Charles Marwood BVM&S MRCVS

FENCELESS GRAZING SYSTEMS

These are now also available, operated using collars with GPS satellite technology. This allows you to create virtual grazing systems, strip grazing to improve pasture management or create exclusion zones where we don't want cattle to graze, for example, in liver fluke habitats at high-risk times of the year.

BEHAVIOUR MONITORING

Behaviour monitoring collars and ear tags using the same technology are now being used on beef farms. Excellent for convenient heat detection, improving conception rates for AI in both cows and heifers, and identifying non-bulling anoestrus cows. Ear tag transducers are also being successfully used to monitor youngstock health, identifying animals with reduced appetite or changes in behaviour, which could be an indicator of disease and ill-health.

There are currently less applications for sheep flock management than dairy, but with EID tags, automated sheep handling systems with weigh-crates and shedding gates, together with EID readers and individual animal medicine records, there are **huge opportunities to improve flock health and management.**

Regular weight records will identify underperforming adult animals, allowing early culling, maximising cull values. Calculating liveweight gain of store lambs is also very valuable. High performing animals, achieving target LWG, require less dosing with anthelmintics, allowing targeted treatments of lambs that are not thriving. This information must be used in combination with routine faecal egg counts and the investigation of other causes of ill-thrift, including trace element deficiencies.

With technology advancing faster than ever and artificial intelligence now being integrated into everyday life, **technology on farms is here to stay.** These technologies should be embraced but they are **NOT** a replacement for good stockmanship, good management and husbandry.

With the correct systems, technology can improve animal welfare, food quality and productivity. They are excellent aids to ease management, but you still need an experienced farmer behind the scenes to ensure things are working correctly, as we all know, technology can frequently let us down.

We're delighted to welcome Colin Buchan BVMS CertAVP MRCVS to our Lanark veterinary team!

Originally from Falkirk, Colin graduated from the University of Glasgow in 2006, and after 2 years working in the Lake District, he returned to Scotland to further his interest in farm work.

Colin has an interest in foot trimming, fertility and calf health. He is an Official Veterinarian for the Animal and Plant Health Agency and a member of the British Cattle Veterinary Association and the Sheep Veterinary Society. Colin is an AHDB mobility mentor for their Healthy Hooves programme.

Outside of work he coaches a kids rugby team and enjoys spending time with his young family.

Join us in giving Colin a warm welcome to Clyde!