

Blood-profiling can bring out the best in production

IT'S often about what they don't need rather than what they do need! Blood-profiling can be extremely beneficial in beef and sheep enterprises to monitor a range of parameters so as to optimise production.

For this reason, they are often referred to as productivity profiles. Productivity profiles aid decision-making and take the guesswork out of farming – the classic being whether to supplement or not. Sadly, our evidence shows that most guessed treatments and supplements weren't actually needed.

What exactly are productivity profiles?

Productivity profiles are a set of blood tests carried out on a sample of animals from the herd or flock – the animals chosen should be typical, average specimens for the group and any temptation to include the worst or the best or the downright weird should be resisted. The tests are designed to assess energy, protein and trace element status and certain illnesses such as liver disease.

BLOOD PROFILES

Lee-Anne Oliver, of Scott Mitchell & Associates, explains the benefits of blood-profiling

When do we carry out productivity profiles?

In beef herds, sampling twice a year is recommended. In January – to assess the winter ration, and in July – to assess the summer ration. Testing should only be carried once stock have been on the same ration for at least two months. In sheep, profiling is recommended in January, so that any fluke treatments or trace element supplementation can be made pre-lambing.

Closer to lambing, more specific profiles called metabolic profiles can be used to assess energy and protein levels. These results can be used to closely manage ewe nutrition close to lambing so as to reduce twin lamb disease and optimise colostrum quality, milk supply and in turn reduce ewe mastitis.

Which animals should be sampled?

It is recommended five animals are sampled from each group that are managed nutritionally differently. This gives sufficient information to make decisions on the whole group of animals without having to sample them all. It is therefore important that representative animals are sampled and, as already stated, not the poor or sick ones, which may be sick for other reasons and have reduced feed intakes which would skew the results.

Which parameters are tested?

Trace elements commonly tested include copper, selenium and cobalt. By averaging the values, deficiencies can be identified and corrected accordingly. Often, supplementation



ADVICE: Lee-Anne Oliver, of Scott Mitchell & Associates

is not required. Liver enzymes are measured to assess liver health. Raised liver enzymes can reveal early fluke infection before fluke eggs would be detectable in the faeces. Protein levels are made up of two parameters – albumin and globulin. Raised globulins can indicate chronic inflammation and infection, and albumin is a reflection of long-

term protein levels. Low albumin may suggest fluke, worms or Johnes' disease. Urea levels also give a current indication of protein and energy levels. This is useful four to six weeks pre-calving and lambing, as these levels are critical for future colostrum and milk production.

How do I do it?

It's easy, ask your vet!