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## Flock trace mineral planning for optimal health

At weaning body condition score ewes and make a grazing plan to ensure optimum body condition at tupping.

 Ahead of turning out ewes and lambs, consider mineral content of grazing pasture and make a plan for longer term supplement needs.

Metabolic profiling pregnant ewes close to lambing can help with feed planning pre-lambing.

Trace element analysis can be added in to monitor the effects of supplements.

When housing for lambing consider the total mineral intake carefully to avoid toxicity risk (especially for copper).

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Monitor performance (growth rate/weight) and consider blood sampling lambs to determine if they need additional trace element supplementation to finish.

At least 6-8 weeks before tupping, body condition score ewes again and adjust grazing accordingly.

This is a good time to consider blood and liver tissue sampling ewes to determine the need for any trace elements throughout pregnancy.

> Sampling 8 weeks prior to tupping allows changes to be made 6 weeks before tupping to be effective.

Don't forget the rams at this time too! Leaving until tupping is too late to be effective.

At scanning body condition score ewes and adjust grazing and feeding accordingly, considering the number of foetuses.

Consider blood testing ewes to determine the effects of any trace element supplements given.









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## Forage sampling

Each season sample the grazing fields by walking through the field in a rough zig-zag. Use scissors to sample the grass at ~5 cm from the ground whilst wearing gloves. Collect snippets from various points across each field to give an overview of the whole field in the sample. Take care to avoid gateways, field edges, water troughs or other areas of potential soil contamination.



If you do not want to sample all fields consider choosing different fields each year to build a whole farm picture.

Mineral content of pasture changes with weather and season. Staggering the analysis of pasture by 1-2 months each year will help build the picture of the effects of seasonality and rainfall.

Conserved forage should be based on samples from multiple bales, taken either from a minimum of three bales or from several places across a clamp. Samples need to be taken from deep within the middle of bales rather than the surface.

Conserved forage data if analysed from a single field, can be used to give an idea of pasture trace mineral content for the field it was harvested from- saving sampling and analysis costs.

## Animal sampling



Blood samples are reflective of the short term changes in trace mineral status and intake.

Liver samples are reflective of the longer-term, historic intake.

Where live animals are used for blood sampling and liver biopsy, ensure that healthy individuals are chosen and represent a typical crosssection of your flock. For flocks managed as a single group choose 6-8 healthy individuals for

sampling, or 4 from each management group to be representative of the whole flock/group. A cheaper alternative to liver biopsy is to recover liver samples from the abattoir.

If considering live liver biopsy ensure that if necessary sheep are treated for liver fluke a few weeks before and that other serious health problems are dealt with to avoid complications post-biopsy.

Always test and monitor the success of your trace mineral supplementation strategy to optimise health and avoid ineffective or unnecessary supplementation. The duration of supplements will differ for your farm, flock and animals.

The best way to optimise your flock health is to test, check and adjust in a continuous cycle.



