

Farming for a Better Climate



Working towards net zero carbon at Hundleshope Farm

Kate and Ed Rowell run Hundleshope farm as 5th generation farmers; the family have been farming on the tenanted farm Hundleshope in Peebleshire, Scottish Borders for over 50 years and have been on the estate for over 150 years.

Kate and Ed took over from Kate's father in 2004 after moving home from County Durham where Kate worked as a vet. The farm extends to 750ha ranging from flat ground capable of growing barley to a heather hill rising to 2200ft. The

farm runs a flock of around 450 cross bred ewes, mainly mules producing finished lambs. In addition the farm runs 300 blackface ewes on the hill land being tupped with the cheviot and producing store lambs. The farms suckler cow enterprise has a range of native bred cows utilising Charolais, Shorthorn and Luining bulls, again producing calves for the store market.



Farming with the environment for a profitable business

Maintaining a profitable beef and sheep farm is challenging especially in an upland farm, so Kate & Ed have to look at ways to cut cost out of the system wherever possible whilst maintaining farm output.

Ensuring upland beef and sheep farms are viable is not only important for the production of high-quality beef and lamb but also to supply a product for finishers and low ground farms to take on store lambs and cattle where they are more suited to be finished.

Kate & Ed are passionate about protecting and enhancing the land and environment in which they farm; the land at Hundleshope farm ranges from upland low production heather hill to high yielding inbye land capable of producing barley and high quality grass.

They are involved in an Agri-Environment Climate Scheme where they farm in a manner to protect and enhance Scotland's water quality, wading birds and ecosystems. The farm works to an agreed plan with Nature Scot to graze and burn heather on the hill for the benefit of the heather, wildlife and grazing livestock.

Wetlands are also managed in a way to promote habitat for insects and wading birds, and the juniper on the hill has been fenced off to promote its growth by excluding livestock.

Case Study

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Feeding livestock – exploring alternatives to soya

The production of high-quality grass silage on the farm meant that Kate and Ed were able to change how they fed the ewes on the run up to lambing.

The farm successfully ran trials on feeding only silage, soya and minerals and was one of the first farms to take the idea forward. The feeding trial meant that there was significant cost savings, as most of the nutrition was coming from the high quality silage and only being topped up from the use of soya & minerals rather than feeding expensive bought-in ewe rolls, a pelleted mix of protein, energy and minerals, which were previously fed at a much higher rate. Also, as the feeding rate of soya was much lower, there were significant time and labour savings, as the amount of additional feed given to the different groups was much less. This also has a benefit to the carbon footprint where the purchased feed use per ewe is nearly half of the benchmark.

Pleased with the outcome of the trial, Kate & Ed wanted to replace the soya in the ewes diet for something more sustainable. They created the same trial this year feeding Neolac, a locally sourced by-product from the production of cold pressed rapeseed oil. The trial results showed no significant difference in ewe or lamb performance between feeding of protected soya and Neolac with the added benefit of Neolac being a locally sourced and sustainable alternative.

Making best use of what you have got

Kate and Ed have been very passionate about changing their approach to feeding sheep and were able to successfully reduce the quantity of concentrate feeds being fed as a direct result of making good quality grass silage and knowing its nutritional value.

As grass matures, the quality deteriorates and the bulk increases. Historically the approach to making silage was to maximise bulk which left the farm with a lot of feed, but it was lower energy & protein, and therefore not a high quality feed.

The farm now makes high quality silage by sacrificing some yield in favour of a high energy and protein silages. They also now do two cuts from each field to compensate for lower yield.

Higher quality silage reduces the reliance on buying in expensive purchased feeds; grass will be the cheapest and most sustainable feed grown on the farm.

The farm along with a lot of Peeblesshire, are in close proximity to hen dung produced from a local large egg supplier. This is an excellent source of nutrients from a natural source which can be brought on to the farm. It reduces the reliance on purchased manufactured fertiliser which is very energy intensive in its production process. It is also on the doorstep meaning transport of the product is minimal.



Using technology

Kate & Ed have made good use of electronic ID in the sheep flock which gives them the ability to record ewe performance and veterinary administrations all on a handheld computer which can be interrogated by scanning the ewes ear tags or back on the PC in the office.

They regularly weigh lambs using the sheep race and weighing platform, making sure lambs are chosen for slaughter at the correct weight for the specification required by the purchaser. Keeping accurate records on each ewe also aids the flocks performance, making sure any replacement animals are only kept from the best of stock on the farm and from those needing little assistance come lambing time. The farm invested in this kit many years ago and it is now used daily when working with sheep. Kate & Ed also purchased calving cameras through the Agricultural Transformation Programme which allows them to keep an eye on livestock in the sheds at calving and lambing, giving the benefit of not disturbing stock and letting them lamb and calf more naturally but being able to assist if needed.