

The value of trees in grazing land

Pete Leeson at the Woodland Trust works with farmers in Cumbria to find the best way to integrate trees on farms, and says they are an undervalued resource.

“Trees and hedgerows can help farm productivity by providing shelter for livestock and improving animal welfare while extending the grazing season by providing warmer pastures” he said.

“A combination of soil and moisture management through reducing wind speed and transpiration rates, combined with water percolation, are all added benefits.

“In the Eden Valley, the fierce Helm wind increases exposure, particularly in wet weather, and shelter from trees or hedgerows can be a vital asset.”

Shelter belts created by trees and hedgerows reduce wind speeds and water loss from grass. Temperature and water management can be critical factors in grass growth. Shelter increases soil temperature in early spring and late autumn and extends the growing season, providing longer grazing on pasture.

Paul and Nic Renison (@Cannerfarm and @NRenison), Cannerheugh Farm, Renwick, Cumbria

Paul and Nic moved to Cannerheugh in summer 2012. The farm is around 150 ha of which around 50 ha is moorland and the rest pasture. Moving from managing a hefted flock in Patterdale to a more intensive regime on their own farm has changed the way they think about grazing.

The Renisons’ central aim is to breed a hardy white-faced self-replacing flock, with good maternal breeding, that will grow vigorous lambs and thrive on pasture and forage, with minimal concentrate inputs.

They are using better genetics to improve output, while working with a sustainable forage system largely based on rotational grazing. They have 750 hill ewes (Swaledale, Herdwick and Aberfield crosses) and 300 crossbred ewes, who this year received 600 Innovis Abermax embryos. Some of the Abermax lambs will be sold back to Innovis at 18 months, generating extra farm income, and ewe lambs will be kept to increase their own flock.



The Rennison family

Grass is their key resource says Paul. “The better the grass and soil, the better our productivity and we’re doing all we can to achieve that.”



Nic Renison: Rotational grazing October 2015

Overall, 80 ha is used for rotational grazing and fields of 2.5 ha are split into one hectare paddocks. The sheep fertilise the ground, which encourages clover and ryegrasses to grow. Rotation allows for flexibility as numbers of stock in a ‘mob’ can vary, as can the size of the paddocks, depending on season and grass growth. Dairy heifers on contract are used within the rotation to maintain quality. If there is an excess of pasture, a small amount of silage will be made.

When the grass has reached seven centimetres, sheep are turned onto a paddock at a high density, up to 300 sheep over approximately one hectare. They are moved on every couple of days when grass has been grazed down to around four centimetres. This process ensures that each plant is browsed, encourages better sward health and means that the grass is eaten evenly and quickly, rather than the sheep selectively grazing.



Nic Renison: Mob being moved

Paddocks are rested for around three to four weeks to give the sward time to recover. Moving sheep regularly minimises footrot issues, as animals are on fresh land. It is hoped that worm issues are reduced too. Paul believes that the early results show that rotational grazing is a sustainable approach in the long term.

The Renisons sought advice on grassland management from Duncan Nelless, who farms organically in Northumberland, and Paul is keen to adopt his approach. "I was impressed with the stocking density Duncan achieves on his permanent pasture and the amount of forage produced off pasture without inorganic fertiliser," he said. "Duncan uses compost which improves the humus content in the soil."

Soil at Cannerheugh is mainly light and sandy and needs improving. They are aiming for a soil pH of 6 to 6.5 and are trying to decrease the use of inorganic fertiliser. Soil tests show there is a need for increased calcium, which they'll correct with gypsum. Paul has started composting farmyard manure.



Nic Renison: Tree planting and wildlife corridor

The farm is in a Higher Level Stewardship scheme. The Renisons have planted 4,000 trees and saplings with advice and help from Pete Leeson at the Woodland Trust. New wide hedgerows top high-banks (known locally as kests) to provide shelter. Individual trees (native broadleaf and Scots pine) have been strategically sited across the farm for browsing and shelter. Leaf fall will help improve the soil and contribute to improving organic matter and the roots will help increase water infiltration.

Ewes giving birth will seek shelter if it is available, so wide hedges play an important part in reducing exposure and lamb mortality. Nationally, neonatal lamb mortality is around 15%, more in some flocks. Studies have shown in cold, wet and windy weather lamb losses can be reduced by up to 30% if good shelter is provided. Shelter belts can be designed to assist the natural behaviour of ewes, providing isolation during lambing which increases bonding between the ewe and lambs, enabling better suckling and colostrum intake. They can also reduce the risk of mastitis as exposure to cold winds is reduced.

Trees and wide hedges improve drainage and provide a barrier to prevent stock entering wet areas. Wet conditions under foot impact on lameness and liver fluke.

The Woodland Trust gives advice about integrating trees and hedgerows into farms, and offers subsidised trees. To find out how you could benefit email plant@woodlandtrust.org.uk or call 0330 333 5303.

For more information visit their [website](#).

For more information on grazing strategies see the BRP manual, [Planning Grazing Strategies for Better Returns](#)