Shelter boosts lamb survival rate

Cumbria farmer's selective tree planting policy reaps multiple rewards

Farming at over 1,000 feet at the northern foot of the Lake District's Skiddaw Range brings considerable challenges, but Cumbrian farmer David Noble is proof of how the small-scale tactical planting of trees and hedgerows can help to transform a farm in just a few short years.

Neo-natal lamb deaths

With a flock of 400 ewes and no artificial shelter, protection for newborn lambs is critical to the farm's economic success. David knows from bitter experience that at over 1,000 feet, wind chill can decimate lambs. "Hypothermia is a real risk in the first two to three days" he comments. "It can take as many as 10 newborn lambs in a single night, and that is a real economic loss. Improving the welfare of the flock and protecting these hill-bred lambs is a real positive for the farm."

Natural planting was the solution. Working with the Woodland Trust, David planted a small strip of non-productive land with a mix of native trees and shrubs. Goat willow, hawthorn, hazel, oak, blackthorn and rowan were chosen to reflect the altitude and soil type, and provide levels of shelter.

It gives me a great deal of pleasure to see what we have achieved over the years. Strategic planting has improved the visual aspect of the farm and developed new habitats which means that the farm looks better than it did when we took over. That is something to be proud of.

David Noble, upland sheep farmer, Cumbria

From low shrubs around the edges to protect livestock, to taller trees to channel the wind and prevent vortex effects, the planting scheme was developed by the Woodland Trust to maximise the benefits from a small but crucial planting scheme. The scheme aims to provide shelter in winter and spring, plus summer shade. It is also hoped that poaching will be reduced in wet weather, causing less sward damage and reducing the risk to Cross Compliance payments.

This simple and small-scale scheme looks set to deliver real benefits to livestock, and to the farm.

Hedgerow restoration key

The recent shelter scheme is not David's first experience of the benefit of trees to farming. David and his family moved onto the farm some 18 years ago and previously, hedgerows and tree planting had not been seen as a priority. However, investing in those areas has certainly benefited the farm.



Key facts:

- Hypothermia is a major killer of hill-bred lambs and financial losses can be considerable.
- The planting of small, but strategically planted shelterbelts can reduce neo-natal losses.
- Low shrubby bushes around the perimeter of the planted area provide excellent protection for livestock. Taller trees provide shade in summer and guard against vortex wind effects.
- Tree planting can also help farmers to deliver under Cross Compliance guidelines.
- Water pollution and poaching can contribute to Cross Compliance failings, but tree planting can improve the form and function of watercourses: reinforcing banks, reducing run-off and removing access for livestock, all examples of best practice.
- The planting of willows and other tree species with high water consumption can help dry boggy areas, reducing the risk of poaching and damage to the sward.
- Tree planting and hedgerow restoration need not be bigscale or expensive: small tactical schemes often deliver significant benefits.

David's first priority was to replace weak and broken fencing, but without extensive funds and no farm workers beyond David himself, all improvements had to be carefully prioritised.

David double-fenced key fields and planted hawthorn hedges and single trees. The benefits in terms of shade and shelter were almost immediate, and this is a policy that has now been rolled out successfully across the farm.

Improving water quality

Such strategic planting schemes also proved beneficial to David's management of the farm.

David's farm runs from lower-lying pastures through to the open fell, and features a beck that was prone to flash flooding. Poorly maintained, it was open to pollution by livestock; surrounding ground was often muddy. Conditions such as this can prove problematic if not addressed, encouraging both lameness and snail-borne liver fluke in sheep.

David and the Eden Rivers Trust planted willow and deciduous trees beside the beck to stabilise the banks. Just 10 years on, the results are clear. The beck is better maintained, the water clearer and the fields less prone to water logging and flooding. What is more, David has seen a radical change in the quality of wildlife attracted to the water.

"The look and function of the stream has improved dramatically," David says. "The water is so clean that we see a lot of trout, as well as all manner of insects. In turn, the insects are attracting a wide variety of bird life, including dippers. You can see how effective it is as a wildlife corridor.

"Crucially though," David continues, "our work also has a commercial benefit, as the protection of water against pollution is a crucial part of Statutory Management Requirements under Cross Compliance guidelines.

Tree planting has definitely reduced contamination and eased run off, meaning that these standards are achieved more easily."

Whilst commercially focused, and managing on very restricted resources, David has found ways to use trees to deliver commercial benefits to the farm. What is more, he is already able to enjoy the fruits of his labour. "It gives me a great deal of pleasure," he says, "to see what we have achieved over the years. Strategic planting has improved profitability and developed new habitats, which means that the farm looks better than it did when we took over. That is something to be proud of."

FOR MORE INFORMATION CONTACT:

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Many uses for trees on one small farm

- Planting shelterbelts improves the welfare of livestock and reduces neo-natal deaths in hill-bred lambs.
- Planting along riverbanks reduces the risk of pollution entering the water courses and improves water quality: wonderful for wildlife but also critical under the Statutory Management Requirements.
- The rebuilding and replanting of old hedgerows improves stock management and provides shelter and shade.
- The creation of new hedge banks is beneficial in areas where stock control is critical, such as holding pens.
- Mature trees can be pollarded to improve their condition, and the timber retained for use on the farm.

Additional benefits

- Planting a new generation of single field trees, helps to guard against the loss of aging trees and ash dieback, and to provide shelter and wildlife corridors into the future.
- Plans can be put in place to make planting productive, through the provision of leaf litter as feed and wood fuel.
- The Woodland Trust can provide assistance in terms of advice on planting, the provision of skilled contractors and funding.



David and his flock in typical Cumbrian weather conditions



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