



CAMBRIAN TREES

Using Shropshire sheep in plantations

Use of Shropshire sheep in Cambrian Trees' conifer plantations has reduced reliance on herbicides by around 90% and halved the need for mowing and strimming. The sheep are now a firm fixture, but owner Adam Lionel stresses that management of a flock of sheep requires time and commitment to be successful.

"If you're considering Shropshires, it's a good idea to get your partner and family on board too, or perhaps find a dedicated member of staff to manage the flock. The sheep work is enjoyable but requires regular input through the year and is very 'full on' at certain times, such as lambing," explains Adam. He and his partner, Jane Evans, have devised a management regime for their flock that fits in with busy times for their Christmas tree business. Having introduced the Shropshires in 2012, they believe the concept of grazing plantations has a lot to offer British tree growers:

"Sheep are a new, more natural way of doing things. Using them is more compatible with environmentally friendly tree production – and with the massive hike in cost of agrochemicals and fuel, Shropshires are likely to become an even more attractive option.

"Cutting down use of herbicides, diesel and petrol sends a very positive message to retailers and the public," he adds.

There have been some unexpected bonuses from running the Shropshires, too – such as their ability to control Rosebay Willowherb if put into the plantations at the right time. This weed is known to spread rust diseases among Nordmann fir.

The "Tree Friendly" Breed

Shropshire sheep are well known for being the "tree friendly" breed and are used widely by conifer growers in northern Europe and Scandinavia, where they have a great track record of grazing safely without damaging the trees.



More recently, they have come to the attention of orchard and vineyard owners. The breed is now used to graze in a range of different deciduous plantations in Britain, France and southern Europe.

Shropshires offer a useful income stream in their own right, being reasonably prolific and with the ability to produce good quality butchers' lambs. Ewes are docile and easy to manage, and they thrive in a wide range of conditions. Although classed as a "rare breed" in the 1970s, the Shropshire has grown in popularity in the UK over recent decades: The breed society, the Shropshire Sheep Breeders' Association, now has around 350 members and there are flocks to be found in most regions.

Adam and Jane became interested in Shropshires when their tree plantations were relatively young and required a fair bit of maintenance work in terms of grass and weed control. With their holding being situated in Wales in the Cambrian Mountains, this was proving to be a challenge due to the wet weather conditions. The family-run business has around 100 acres growing up to 200,000 trees including Norway Spruce, Nordmann Fir, Fraser Fir and Scots Pine. The business supplies the wholesale and retail trade.

The couple spent time researching Shropshires and the recommended management system, before introducing 30 ewes into their plantations. "We had to brush-up on our shepherding skills, and then find the best way of managing them on our holding, where there isn't a lot of land without trees," says Adam. "Keeping sheep in a plantation requires a different approach to keeping them in a field." Adam and Jane have gradually expanded their flock, which now numbers around 80 ewes.

Breeding and Management

It is essential that Shropshires remain pure-bred, to ensure the continuance of their tree safe nature. Adam and Jane are members of the breed society and regularly buy-in tups from registered Shropshire breeders to bring in fresh bloodlines. There is a list of registered pedigree breeders in each area of the country on the SSBA's website.

Shropshires can breed "out of season" and will mate naturally as early as August, to lamb in December. However, Adam and Jane lamb their ewes at the end of February and through March, when they have more time available. *Continued/...*



Tups are put in with ewes during the third week of September and are left in for a month, to ensure a tight lambing. The Cambrian flock typically achieves a lambing percentage of around 140%.

Every holding will be different, and Adam explains that he houses his ewes around 10th November each year to rest the land and move the sheep out of the way of tree harvesting operations. The sheep will remain in the barn until they start lambing in February. To begin with they are fed only hay and minerals. Sheep nuts are gradually introduced about a month before lambing to ensure healthy, viable lambs.

Lambs are kept in the barn with their mothers for a minimum of three or four days, so that they can properly bond and Adam and Jane can check the ewes are suckling properly. Shropshires are generally very good mothers but occasionally need a bit of supervision. Lambing in Feb/March works well because by the time the lambs are old enough to start eating grass, the herbage in the plantations is growing vigorously and needs to be controlled.

Introducing ewes and lambs to the plantation

When turning out the ewes and lambs, Adam stresses that it is important to choose a suitable plantation with smaller, younger trees, not a more mature one where the ewes and lambs cannot see each other because the trees are large and close together. The lambs must be able to follow the ewes and get used to the tree environment.

Typically Adam favours a plantation with first year planted trees, mixed with older trees up to 4 or 5 years old. "We tend to split the flock up into small groups of, say, 15 animals. This makes it much easier to count the sheep. We also feed a small amount every morning, and the sheep soon learn to come for that and then we can see them easily. They must be checked every day.

It's difficult to advise categorically on stocking rates because every farm will be different - factors such as the quality and

abundance of the grass, the density of the trees will need to be considered."

Adam works on a general rule of 1 ewe per acre. Mature rams are not allowed in the plantations out of the breeding season and are kept in smaller grass paddocks.

Lambs are weaned at around four to five months weighing 40kg plus and are either taken to a market or sold to a dealer. Male lambs are kept entire and don't cause problems if sold at this time. Female lambs are generally retained either as flock replacements or for sale as breeding stock.

Have the sheep ever damaged the trees?

Shropshires can occasionally start nibbling the trees – and if this happens the "rogue" sheep must be immediately removed or others will copy the behaviour. A lack of available herbage or minerals can sometimes trigger this problem. Minerals should, therefore, always be available. Adam reports that his sheep have never been tree nibblers – although he does move them out of the younger plantations when there is new growth just to be on the safe side. He has noticed that the occasional tree will become a favourite "scratching post" for the whole group, particularly in the run up to shearing. He sees the loss of the odd tree in this way as a small price to pay for the overall benefit of having the flock



Routine tasks

Sheep require a number of regular health treatments, such as worming, foot trimming and vaccinating against common diseases. The Cambrian flock is vaccinated against Clostridial diseases with Heptavac P, and against Orf with Scabbivax. FootVax (which does what it says on the tin!) is also used periodically to keep foot rot under control.

Shearing is usually carried out in May, a bit earlier than Adam's sheep farming neighbours shear their flocks. Sheep in tree plantations are at a higher risk of getting fly strike.

Once the fleeces are off, "pour-ons" such as Clik should be applied to prevent problems with flies for up to 16 weeks. Other products with shorter protection periods are also available. The wool price has been pretty poor in recent years, but Shropshires have a good quality fleece weighing around 3kg, so the price from the Wool Board does usually cover the cost of shearing.

Conclusions

In summary, Adam says that the income from the sale of finished Shropshire lambs, breeding stock and wool (in a good year for wool prices) means that the flock covers its running costs. The benefits to the plantation management are, therefore, all additional:

- We only have to spot spray the weeds that the sheep don't eat (thistles, brambles and nettles);
- We spend just a fraction of what we used to on agrochemicals, some of which are being phased out as their use almost becomes a "taboo subject";
- We do still have to mow and trim, but it is much quicker because most of the weeds and herbage have been eaten by the sheep;
- With less mowing/trimming, there is much less wear and tear on the equipment.

"The sheep flock requires time and effort – it is a different type of work to the trees, but enjoyable work," Adam says.

"In the current climate, we have to start changing the way we do things. With rising input costs, the Shropshires offer a more environmentally friendly, more sustainable method of herbage control for the long-term."

FOR MORE INFORMATION:

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Shropshire Sheep Breeders' Association

A guide to managing Shropshire Sheep in tree plantations of many kinds, "**Two Crops From One Acre**", can be downloaded from the Publications and Forms page of the SSBA's Website:
www.shropshire-sheep.co.uk

The Association's Sales Officer, Claire Jakeman, can be contacted on 07766 238346