Environmental Stewardship

Case study: The Beeches - best practice farm visit

Name: Brian Dixon

Region/County: East Yorkshire

Farm Size/Type: 500 acres/mixed arable

Stocking: small suckler herd

Cropping: wheat, barley and oil seed rape

Key objectives: high priority area for farmland birds, butterflies, arable plants, water voles, dragon flies and amphibians such as frogs and toads.

Farmers gathered on a glorious stretch of the River Hull on a rare sunny day in June to hear how they could help to safeguard the unique chalk rivers in East Yorkshire by making the most of their Entry Level Scheme (ELS) options.

A mixed farm bordering the River Hull was the venue for a Best Practice Farm Walk focusing on resource protection. Farmers gathered at The Beeches, courtesy of Mr Brian Dixon, to hear how they could best manage the options within their Entry Level Stewardship Schemes to protect water and soil.

As well as hearing from expert farm advisers, the walk was also an excellent opportunity for the farmers to share their own experiences of implementing option prescriptions. Farmers exchanged ideas about how to control pernicious weeds, establish margins and wild bird seed mixtures and how to locate rotational options such as over-wintered stubble.

Mr Dixon, the event host, is an enthusiastic advocate of ELS and is now into his second agreement. The farm extends to 500 acres and is predominantly arable, growing wheat, barley and oil seed rape. Mr Dixon also has a small suckler herd that grazes tracts of permanent grassland that remain across the farm.

Brendan O'Connor and Derek Knight led the farm walk on behalf of Natural England and introduced the event in the yard at the Beeches.

"Today's event is about focusing on those options which are designed to protect water and soil. We're also going to review the prescriptions for several options that have changed over the lifetime of the scheme to make sure that you are all aware of the detail that applies to your agreement. Many of you will have now renewed your agreement and there will have been subtle changes to the option requirements compared to when you first joined the scheme," Derek explained.

The Beeches is in a priority area for both groundwater and surface water as a consequence of the importance of the River Hull Headwaters SSSI. It is also in a high priority area for farmland birds, butterflies, arable plants, water voles, dragon flies and amphibians such as frogs and toads. As such, farmers in this beautiful part of East Yorkshire have a very important role to play in order to conserve some of the most precious wildlife in the north of England.

Water quality is very important to Brian Dixon because as well as the farming enterprises at The Beeches, he has used the stunning stretch of the River Hull that runs through his farm to establish a successful tourism business. He promotes fly fishing and also offers bed and breakfast to the anglers that come to enjoy the beautiful chalk river.

“This is a chalk stream and the vast majority of it is spring fed. It lies at the foot of the Yorkshire Wolds and a lot of the water in it has percolated through the chalk, coming up as springs before entering the main stream course. We’re improving our stretch all the time and we have people from all over Europe fishing with us and they pay good money,” Brian explained.

Sediment entering the river or diffuse pollution caused by phosphate or nitrates leaching from adjacent fields causing algal blooms could significantly affect the spawning success of brown trout, grayling and salmon which are all found in numbers in the river.

A field margin bordering a ditch and hedge in the corner of a field was the first stop on the farm walk. Brendan chose this location to introduce the three main ways of protecting water which are tackling the source, slowing the pathway and protecting the receptor.

“The best way to prevent unwanted materials from entering water is to grow something in the field, whether it is the crop itself, a cover crop or an undersown ley. By ensuring that there is some form of vegetation cover, it is less likely that the nutrients, the soils and other substances such as pesticide residues will run or seep off the field and into a watercourse,” Brendan suggested.

Awkward field corners often receive more inputs than other parts of the field and are more prone to compaction as machinery has to pass repeatedly over the same area to manoeuvre. They also consume a disproportionate amount of time and rarely yield as much as the remainder of a field. As such, they are an ideal area to take out of production, thus reducing a potential source of nutrient or sediment.

Brian was quick to point out that this option didn’t have to be restricted to corners, outlining how he had used it on his farm;

“We have field corners in the middle of fields and this is allowed under the rules of the scheme. We’ve chosen the least productive parts of our field to put into the option and we’re managing these ‘corners’ in accordance with the option prescription. It’s working well for us because these were always the areas that cost the most and yielded the least.”

Fraser Hugill, Campaign for the Farmed Environment Co-ordinator, highlighted another important benefit of the way that Brian has implemented the field corner management option at The Beeches.

“I’m guessing that the areas that you’ve now placed in this option were the bits of the field where you previously applied the most slug pellets because they used to lie wet. By taking these parts of the field out of production and putting them into field corner management, you will no longer need to do this. Now there will be a reduced risk of metaldehyde contamination of groundwater and leaching into surface waters and this is great news for water quality,” Fraser pointed out.

Slowing the pathway by which nutrient and sediment can reach water is another means of reducing the likelihood of diffuse or point source pollution. Permanent grassland with low or very low inputs is another option that reduces the amount of sediment or nutrient reaching sensitive water resources.

Although grassland is a scarce resource in this typically arable area, Brian has retained fields next to the river which he grazes with his suckler herd.

“I decided that it would make more sense to keep these areas in grass; they flood regularly and are always wet. I think a lot of farmers who have brought the river meadows under the plough have since regretted it,” he mused. Brendan agreed with this sentiment.

“Quite a few of you here will have tracts of grassland close to the river banks and the low input grassland option is ideal in this situation. By conserving these areas of grass close to watercourses, you are slowing the pathway of nutrients percolating through the profile or running off into the streams close by,” Brendan advised.

Protecting the receptor is another mechanism of protecting water quality. Derek Knight outlined how this could be achieved by several means including placing buffer strips along ditches, streams and rivers or by fencing off vulnerable lengths of watercourses from stock access.

Brian has established a six metre buffer strip adjacent to a ditch which feeds into the River Hull. In accordance with the option prescription, he has mowed the three metres nearest to the crop and has allowed a dense tussocky sward to develop next to the ditch banks.

“These margins next to my streams and ditches mean that I don’t have to worry about LERAPs (Local Environmental Risk Assessment for Pesticides) and because I mow the strip nearest the crop, they also provide hay for my cattle in winter. You’ll see that they’re wider than six metres along most of their length in addition to the cross compliance margin and this has helped me to straighten up my field edges.”

Rachel Webster, the Catchment Sensitive Farming Officer for the East Riding of Yorkshire explained that ELS is a multi-objective scheme and some options can benefit both resource protection and wildlife.

“Ideally, from a resource protection perspective, the wider and more tussocky the margin, the better, as it will have more capacity to capture sediment and nutrients before they get to the water. However, six metre margins also provide habitat for farmland birds as the mown strip provides an area where the chicks can dry out. Where your buffer strip is next to a watercourse, remember to use the correct code or even consider a 12m grass margin as this could allow you to square up the field.’’

Derek pointed to a short length of the stream where Brian’s cattle could access the water to drink and suggested that this could lead to contamination of the water by faeces so fencing it off might be desirable.

“If you are going to fence off a watercourse, you need to think carefully about how to do it because you still need to manage the riparian vegetation. Perhaps consider moving the fence out at least six metres from the bank edge so that you can still graze it. That way you prevent the vegetation from becoming too rank which can lead to colonisation by species such as Himalayan Balsam. You can also include the area in your Single Payment claim because you are still actively farming it,” Fraser Hugill suggested.

Crystal clear water gushed along the River Hull after months of unseasonal heavy rainfall and as curlews called, swifts chattered and brown trout caused ripples as they leapt out of the water, there could be few more idyllic settings for a farm walk.

“I think that as farmers, we’re extremely privileged to look after our beautiful countryside. I’m trying to leave a better environment on my farm for my son and grandson than when I took it on all those years ago. And ELS pays me to do this – so I’m better off financially and the environment benefits too,” Brian concluded.

ELS Best Practice Farm Walks are taking place across England. For more details about a walk near you, visit the Natural England website

Where can I find out more?

Please follow this link for the latest information on Environmental Stewardship.