



# A clear solution for farmers

ENGLAND CATCHMENT SENSITIVE FARMING DELIVERY INITIATIVE

## HLS projects achieve environmental goals

West End Farm, Harpham, Driffield

## East Riding of Yorkshire & North Lincolnshire

CSFO: Richard Wilson

### Farm Description

West End Farm is run by Peter and Sarah Burdass. It is a dairy farm with 101ha of land and a dairy herd consisting of 160 Holstein cows a modern bottling plant.

The farm is at Harpham which is within the River Hull Headwaters catchment. This watercourse has been designated a Site of Special Scientific Interest (SSSI). The River Hull is the most northerly chalk river in England and has clear chalk water, gravel beds and aquatic flora.

Lowthorpe Beck is a tributary of the River Hull and West End Farm lies in the upper reaches of the Beck. Lowthorpe Beck flows through fields grazed by the dairy herd. These fields include 5ha of fen and give the dairy cows 270 metres of bank access to the Beck for drinking water. Dairy cows require a significant quantity of drinking water each day so would spend some time in Lowthorpe Beck.



Fencing keeps cattle out of the beck and the banks are recovering from poaching

### Pollution Problems

The dairy herd were grazing in the two fields which border Lowthorpe Beck and several surrounding fields. They drank from Lowthorpe Beck, poaching the banks and disturbing sediments. This was increasing the sediment load of Lowthorpe Beck and ultimately the River Hull.

Sedimentation is a problem in the River Hull Headwaters. Gravel beds covered in sediment prevent brown trout from spawning.

A film of algae was present on rocks in Lowthorpe Beck which may have been due to elevated nutrient levels. This could have been from the animals defecating whilst wading in the Beck. Increased algal growth can lead to eutrophication and loss of biodiversity.

Therefore the two pollution issues were:

1. Prevent the cattle from getting into Lowthorpe Beck and poaching the banks.
2. Provide an alternative source of drinking water.

These two issues required considerable investment to remedy. Peter & Sarah were keen to help but were unable to at the time as they were expanding their farming enterprise.

## Pollution Solution

West End Farm already had an ELS Agreement. The two fields that bordered Lowthorpe Beck were taken out of the ELS and put into a separate ELS / HLS Agreement. The reason for this was that they are within the SSSI. They contain species rich grassland and fenland, supporting a diverse range of flora and fauna.

Natural England, along with England Catchment Sensitive Farming Delivery Initiative (ECSFDI), the Chalk Rivers Trust and the Yorkshire Wildlife Trust considered the resource protection issues. The first challenge was to prevent the cattle from getting access to the Beck.

The solution was to fence off the Beck. This involved 45 metres of fencing, a gate, the creation of a corral next to the Beck to gather the cows and a further 221 metres of fencing in the grass field alongside the Beck. Due to the very wet and soft ground a combination of sheep fencing and an off-set electric wire to keep the cattle from pushing at the fence was needed. As this work was for the benefit of the SSSI and not for the farming operation it was agreed to fully fund this project as an HLS Special Project.

The second challenge was to provide alternative drinking water for cattle. The farm had recently invested in a new borehole and it was decided that a pump and piped water supply would be installed. Again, as this was for the benefit of the SSSI the 1038 meters of piping, 7 field troughs on hard standing and a pasture pump were fully funded as an HLS Special Project.

[www.defra.gov.uk/foodfarm/landmanage/water/csf](http://www.defra.gov.uk/foodfarm/landmanage/water/csf)

The project involved running 423 metres of pipe from the borehole, over the Beck (attached to the Bridge), 615 metres of pipe to 7 field troughs on hard standing and a pasture pump in the fen.

These two HLS Special Projects have delivered very effective and positive environmental benefits to the gravel beds and ecology of Lowthorpe Beck, which ultimately benefit the River Hull Headwaters SSSI.

## Farmer Engagement and Motivation

Despite Peter having reservations about fencing off what was a totally free water source that gave access to the majority of the cow herd. He now feels that the new system with water troughs in relevant places is working as well, if not better than the previous system.

Peter said "I would never have undertaken such a project due to the costs; however, the funds [from HLS Special Projects] that became available and the fact that the farm had recently invested in its own borehole made it viable. I am also impressed by how it has improved the former drinking space and the river itself".

Catchment Sensitive  
Farming Officer (CSFO)

**Richard Wilson**

Environment Agency  
York

01904 825806

[richard.Wilson@environment-agency.gov.uk](mailto:richard.Wilson@environment-agency.gov.uk)

