

# **Buffer strip creation at the Grand Western Canal Country Park & LNR**



## **Introduction**

The Grand Western Canal Country Park and Local Nature Reserve is based around a beautiful rural stretch of isolated waterway extending for eleven miles between Tiverton in Mid Devon, and the hamlet of Lowdells, near the Somerset border.

Built in 1814, the canal once connected to the Bridgwater and Taunton Canal in Somerset and was used mainly for transporting limestone and coal. The advent of the Bristol and Exeter Railway in the 1850s led to the abandonment of the section of the Grand Western Canal within Somerset, and the limestone trade eventually ended on the remaining 'Devon section' in 1925. After a period of neglect and a successful local campaign to save the canal from obliteration in the 1960s, Devon County Council took over the Canal in 1971 and declared it a Country Park.

## **Buffer strips**

Restoration and management since 1971 have had a strong emphasis on maintaining the environmental quality of the Park, as well as supporting recreational use. The desirability of creating offside buffer strips to reduce silt and nutrient inputs and to improve wildlife habitats was first identified in the 1990s, but significant work to bring this about only commenced in 2003.

Reasons for not embarking on this work earlier relate to the lack of funding and priority attributed to this work and to poor relations with many of the adjacent landowners. In 2003, the appointment of a new Canal Manager provided the opportunity to start afresh in rebuilding relationships with farmers.

A potential funding source for the work was also identified, through entering into a Countryside Stewardship Scheme agreement with Defra (the scheme is now administered by Natural England). The Scheme offered the opportunity to claim capital payments for undertaking fencing work to create wildlife strips, and annual revenue payments for the on-going management of the wildlife strips. This was dovetailed with a broader programme of work focussed on sustainable dredging and silt management in the Canal, for which three year's of funding was secured through an EU Interreg IIIb project.

The benefits of creating offside buffer strips are described in the Environment Agency's information booklet ' Understanding Buffer Strips' and include:

1. Reducing diffuse sediment inputs to the canal: Soil eroded from adjacent farmland during periods of heavy rainfall is 'filtered' by the stems of vegetation growing in the buffer strip. Fencing the buffer strip prevents poaching of the banks by cattle.
2. Reducing diffuse nutrient pollution of the canal: Thick vegetation in the buffer strip takes up a proportion of nutrients that may be leached from adjacent farmland, before they can be flushed into the canal.
3. Improved habitat for wildlife: The thick vegetation provides a much improved habitat for a range of wildlife, as opposed to the previously grazed or cultivated land.
4. Clear demarcation of land ownership: Once the boundary has been agreed with the adjacent landowner, the fencing of this land clearly defines ownership and goes a long way to preventing any future claims of 'adverse possession'.



An offside buffer strip with drinking point

## Working with farmers

The Canal holding includes an average of 3m (plan) of the offside bank, although the actual width of ownership does vary considerably throughout the length of the canal. Prior to 2003, most of the offside ownership was not fenced and was routinely grazed by adjacent landowner's stock, leading to short cropped vegetation and problems of erosion caused by cattle feeding on the bankside and drinking from the canal. Where the adjacent land was used for arable farming, a portion of the Canal holding was often ploughed and cropped.

As there was no evidence that previous Canal Managers had ever formally objected to these practices and the canal holding had not at that time been registered with the Land Registry, there was a clear opportunity for adjacent landowners to object to any fencing of the Canal's holding by claiming 'adverse possession' – a right to carry on using the land as they had been allowed unopposed access to use it for twelve years or more.

As permission was also needed to cross the adjacent landowner's land to undertake fencing works, it was essential that they were supportive of the project. The Canal Manager visited all of the adjacent landowners to introduce himself and listen to any views or issues they had about how the Canal was managed. Where possible he prioritised works which they wished to see undertaken. Many of the farmers were keen to see their land fenced off from the canal, as they felt this would reduce the risk to their livestock from drinking water-borne diseases or parasites, or escaping across the canal.

All adjacent offside landowners have a right for their livestock to drink from the canal, enshrined when the canal was built. To enable stock to drink whilst fencing off the majority of the bank, surfaced drinking points were constructed. Whilst these did not attract any Countryside Stewardship funding, the majority were funded by the Interreg project.

Following on from this initial liaison, a further programme of farm visits was arranged through Devon FWAG. Funded also through the Interreg project, the intention of this work was to offer free advice to all those farming in the immediate Canal catchment on the new (at that time) Environmental Stewardship Scheme which was replacing Countryside Stewardship. The hope was to encourage farmers to apply for Entry Level Environmental Stewardship agreements and to take up options which would benefit the canal, such as field margins (which would effectively enlarge our own buffer strips) and soil management plans. Advice was also provided on Cross-compliance requirements for the new (at that time) Single Farm Payment.

Farmers welcomed the free advice on the forthcoming changes to the agricultural subsidy system many went on to take up Entry Level Environmental Stewardship agreements. The hope is that changes in farming practice over a

wide area will help to reduce the levels of diffuse nutrient pollution and silt input to the Canal over the longer term. This is seen as an essential twin-track approach, alongside the installation of the buffer strips.

## **Countryside Stewardship**

Within the Canal's Countryside Stewardship Scheme agreement, some 4km of offside banks have been fenced to create wildlife strips. The other main elements of the agreement are hedge restoration, coppicing bankside trees and disabled access improvements.

The Countryside Stewardship Scheme payment rate for undertaking the fencing was £1.80 per metre and was undertaken by a specialist contractor. Approximately half the cost of the work was covered by Countryside Stewardship capital funding and over the ten years of the agreement £13k will have been received in revenue payments for managing the strips (mowing and raking where necessary to prevent scrubby growth).

Once fenced, a strip of thick, wildlife-rich vegetation has naturally emerged, with no need for planting or seeding. In some areas, control of brambles and thistles has been required, to prevent their spread along the strip or into adjacent farmland.

## **Conclusions**

The key to achieving the creation of the offside buffer strips at the Grand Western Canal has been the nurturing of a good working relationship with adjacent landowners. It is likely that funding would have been found for the work even without the Countryside Stewardship Scheme agreement, but the project would not have been possible without the support of the adjacent farmers.

With regard to the benefits of buffer strips listed above, it is felt that the work undertaken on the Grand Western Canal certainly achieved numbers 3 and 4. Although there has been no thorough analysis of the effectiveness of the buffer strips at the canal in their ability to achieve numbers 1 and 2, it is felt that whilst they are likely to be more effective if the width of the buffer strips was 5m or more, they are still likely to be having a positive effect in reducing diffuse sediment and nutrient inputs. The long-term effectiveness of this work will have been increased through the associated focus on farming practices in the surrounding catchment.

[www.devon.gov.uk/grandwesterncanal](http://www.devon.gov.uk/grandwesterncanal)

