

Are environmental win-wins achievable on Scottish dairy farms

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There is increasing concern about the need to improve the overall biodiversity value of intensively managed grasslands. The intensity of management of the fields themselves coupled with the fact that such grasslands dominate much of the lowland landscape means that there are few opportunities for many plants, invertebrates, birds or mammals to survive. We have been working to gain an increased understanding of the factors affecting the biodiversity value of grassland field margins, diffuse pollution buffer strips and water margins on grassland-dominated dairy farms within the Cessnock catchment in Ayrshire.

This catchment has been established as a Monitored Priority Catchment by the Scottish Environmental Protection Agency (SEPA) because it represents land use patterns typical of west-coast dairying and because it is at risk of not meeting the environmental objectives of the Water Framework Directive (WFD). The Cessnock is a tributary to the River Irvine which discharges at Irvine Beach. This is a designated Bathing Beach and the condition of bathing waters here have a historically poor quality record because of the presence of agriculturally-derived faecal matter in the freshwater.

In our research, we have been looking to see if win-wins can be achieved, i.e. if fencing off the margins of intensively managed fields next to watercourses to control diffuse pollution has any positive impacts on biodiversity (based on assessments of vegetation composition and condition and the structure of assemblages of invertebrates of importance as food stuffs to farmland birds). This presentation will highlight some of the main findings from this research, indicate some of the conflicts which we have identified and suggest ways of managing diffuse pollution buffer strips to increase their potential to also provide wider biodiversity benefits.