



Managing grassland road verges: a best practice guide

Case study: A55 Conwy Portals - wildflower enhancement using green hay

A case study from: North and Mid Wales Trunk Road Agent (NMWTRA) working on behalf of Welsh Government

Partners/Funders: U Welsh Government (Funding), Kehoe Countryside Ltd. (Contractor), Various freelance botanists co-ordinated by Eryri Ecological Surveys (Monitoring), green hay harvest from Caeau Tan y Bwlch owned and managed by North Wales Wildlife Trust (Plantlife Coronation Meadow site)

In 2015 NMWTRA started a project to enhance and restore the Conwy Portal site as part of the Welsh Government “Road Verges for Wildflowers Initiative”. The site was formed from materials excavated and deposited as part of the A55 expressway tunnel construction in the early 1990’s and about 2/3rd of the area was planted with trees and shrubs. The rest of the site was infrequently maintained fairly rank grassland of varying floristic diversity.

The timing of management cut was moved to late summer, and cuttings were collected to try and reduce fertility of the site. In the areas of low diversity, the areas were cut “hard” using a Ryetec flail and the up-draught created by this machine ensures an efficient collection of the arisings. Following the cut and collect, the ground was scarified using a grass harrow to open up the turf and create areas of bare earth to aid seed establishment. Green hay was harvested from a local SSSI meadow site that is managed by the North Wales Wildlife Trust and this was spread on the same day as harvesting on the scarified ground. Green hay was also collected from one end of the site which already contained yellow rattle plants.

A baseline survey of the flora was undertaken in 2015 and monitoring undertaken in 2017 and 2018 (still awaiting results for 2018). In 2017 there had been an increase in the number and frequency of positive indicator species including yellow rattle, bird’s foot trefoil, meadow vetchling and red clover. Some species such as lady’s bedstraw and red bartsia were recorded for the first time in 2017. There is still a problem of scrub encroachment, especially with suckering blackthorn, and an issue with bramble and ragwort in places, but overall the number of negative indicator species has declined.

Costs and timeframes

2015 green hay harvest £850

2015 baseline monitoring, site preparation, ryetec, scarify and green hay £1750

2016 Cut, collect scarify and spread green hay £2160

2017 Cut, collect scarify, collect and spread green hay £4000

2017 Monitoring: £750

2018 Scrub control and cut and collect £1450



Far left: Scarification using Einbok spring tined harrow to create bare ground for seeding

Left: Final results - yellow rattle establishing well

Below: Spreading green hay sourced from SSSI meadow

