

Road Verge Management Guidance – Case Study



Roadside Grassland Management with Citizen Science Surveys



A total of 65 Roadside Nature Reserves (RNR) along c.80km (1%) of Lincolnshire County Council's (LCC) road network have been managed with hay cutting for biodiversity conservation since 1960 by Lincolnshire Wildlife Trust (LWT).

Roadside Nature Reserves in Lincolnshire contain all roadside SSSIs and the best quality Local Wildlife Sites (LWS). Lincolnshire County Council provides c.£25k per year to LWT to co-ordinate local farmers and other sub-contractors to undertake normally late summer hay cuts and late autumn flails.

This management is designed to maximise biodiversity benefit to grassland vegetation and is in addition to the normally twice annual 1.1m visibility edge cuts maintained by LCC. Roadside Nature Reserve management prescriptions are currently under review between LWT and LCC to establish where visibility cuts can be reduced if road user safety permits. Roadside Nature Reserves are surveyed for the full species list of higher plants with condition assessments at least once every 4 years by experienced volunteers.

Between 2009 and 2016 a series of citizen science projects called 'Life on the Verge' co-ordinated over 250 volunteers to survey road verges for grassland indicator wildflower species. Surveyors were co-ordinated by use of online maps, automated email and an online database which acted as a booking system for 1km survey sections. Survey forms were based on species lists used for LWS selection criteria and incorporated health and safety guidelines signed off by LCC. To assist surveyors, colour wildflower identification guides were produced and

over 55 adult education field classes were given to train 600 attendees.

The projects were funded mainly through the Heritage Lottery Fund with match funding from the local authority and Area of Outstanding Natural Beauty (AONB). Over 160 new roadside LWSs were designated along c.250km of road and the data was uploaded to a GIS system which not only shows designations but can report species lists to 1km resolution or better for over a third of the county's road network. This data set now guides advice to LCC, road network maintenance contractors and utilities companies as well as planning case officers by flagging biodiversity risk on roadsides and providing further detail on request.

It is hoped that with innovations in verge vegetation management that this data set will help to focus effort to maintain and restore favourable condition to roadside LWSs.

In addition to new LWS designations, the remainder of the network is now graded for verge grassland biodiversity quality and is therefore scored for 'restorability' of grassland habitat. This can be used to focus strategic conservation at a landscape level in the future when aiming to restore ecological networks.

To find out more email Mark Schofield mschofield@lincstrust.co.uk