Roadside grassland biomass harvesting along M180 Junctions 1-2 near Doncaster

Following partnership work between Lincolnshire Wildlife Trust, Yorkshire Wildlife Trust’s ‘Green Transport Corridors Project’ and Highways England Area 12, several stretches of Strategic Road Network (SRN) verge in South Yorkshire and North Lincolnshire were identified with potential for biodiversity enhancement in the Humberhead Levels area. One of these, between Junctions 1 and 2 of the M180 just east of Doncaster, was identified as being well placed to trial biomass harvesting for anaerobic digestion.

Highways England and its Service Provider AOne+ worked with consultants Peakhill Associates to conduct an evaluation study of the practical implications for developing a biomass cut and lift operation on the Motorway and Trunk roads within Area 12 of the Highways England network.

The study set out a series of principle objectives which aimed to identify the most appropriate method for cut and collect of the verges and the suitability of the biomass yield for anaerobic digestion (AD).

The anticipated benefits of this approach include:

- The prevention of build-up of organic detritus, reducing risk of carriageway surface flooding during peak precipitation events;
- Minimised spread of cut debris on to the carriageway and reduced hazards for network users through the use of a suction flail;
- Waste product of the vegetation management process gains value as a biofuel;
- Follow-up litter collections will be made easier.

The study showed an average yield of fresh weight biomass of approximately 1 tonne / km of road verge.

Partners / Funders: Highways England Area 12, AOne+, Peakhill Associates, South Cave Tractors.

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