

Merseylink Meadow Runcorn, United Kingdom The Mersey Gateway Project

BIG Biodiversity Challenge Award category: Temporary

Project overview

The Mersey Gateway Project, is a major civil engineering scheme to build a new six-lane cable-stayed bridge over the River Mersey. It includes refurbishing 9.2 km of the existing road network to connect the new bridge to the main motorway network in the north west of England. At a local level, the project will provide a much needed new link between the urban towns of Runcorn and Widnes and will relieve the congested and ageing Silver Jubilee Bridge.

Merseylink Civil Contractors Joint Venture, the project's design and build partner, acknowledges that the construction phase provides the greatest opportunity to influence biodiversity on the project and is keen to make this a positive one.

As a result, a small team from Merseylink, in partnership with The Mersey Gateway Environmental Trust (MGET), joined together to champion the implementation of 2537m² of cornflower meadow into the project boundary.

The aim of the 'Merseylink Meadow' is to provide a much needed stepping stone habitat for wildlife by linking two locally important habitats; Floodbrook Clough, an Ancient Semi-Natural Woodland (SSSI) and Clifton lagoons, another site of high wildlife value for its botanical interest, identified in the local area BAP.



Merseylink Meadow: In bloom.

What were the biodiversity conditions on site, prior to the enhancement?

The receptor site, a large roundabout located at J12 of the M56, was in poor ecological condition, consisting of bare compacted ground supporting very little in the way of biodiversity.

Were there any specific conditions that led to you carrying out this work?

Merseylink was keen to contribute to England's obligations as part of the Government's strategic plan for biodiversity; Biodiversity 2020. Merseylink wanted to support a resilient, ecological network above and beyond the statutory and contractual requirements of the project.

What were the biodiversity measures taken?

The receptor site was severely disturbed by the construction works and prior to this was subject to extreme environmental pressure due to its location as a key feature of a busy road network. The project's landscape design will see this area transformed by 2017 into a species-rich grassland with long term management, beneficial for biodiversity. Whilst this will provide a solution to the aims in the long run, during the interim period this area was due to be seeded with a traditionally used species-poor grass mix.

The Merseylink Meadow team saw this as an opportunity to enhance biodiversity, especially due to the proximity of neighbouring wildlife sites. The team decided to replace the species-poor seed mix with a species-rich cornflower seed. This would provide maximum benefit for biodiversity whilst creating an impressive floral display at a key traffic pinch-point location, within the project boundary.



Receptor site: M56 J12 Roundabout (BEFORE)

The source of the seed was an important consideration in reducing the carbon footprint and supporting the local community. Landlife is a local wildflower conservation charity based at the National Wildflower Centre, Knowsley, Merseyside. They are responsible for England's flagship project 'Grow Wild' which saw two major cities, Liverpool and Manchester, brought together through the benefits of wildflowers. Consequently Landlife were the natural choice as the seed supplier for the Merseylink Meadow scheme.

How would you best describe the project?

An enhancement

Further information

The area was prepared by rotavating the ground before applying a layer of sub-soil. Sub-soil was used in favour of top soil as it contains fewer nutrients thus providing the ideal ecological conditions for cornflowers and also provided a cost saving for the Project.

The cornflower seed mix sourced from Landlife was sown using a hydro-seeder at a rate of 5mg/m² covering an area of 2537m² in size. The works were undertaken in May 2016 by the landscaping contractor as part of the original programme of works but with the amended seed mix in place. The mix contained a variety of cornflower species including Corncockle, Cornflower, Corn Chamomile, Corn Marigold, and Corn Poppy all of which are hugely beneficial, particularly for pollinating species. Such as bumblebees, honeybees, solitary bees and hoverflies.

The Merseylink Meadow has clearly demonstrated a cost-effective solution for achieving a net gain for biodiversity by recognising this early opportunity. This type of initiative, creating temporary or stepping stone habitats, will support a whole host of species that have evolved and adapted in line with the ever changing environment. These areas are critical to facilitating movement and providing refuge for multiple species and providing a host of ecosystem services - provisioning, supporting regulating and cultural benefits.



Receptor site: M56 J12 Roundabout (AFTER)

What was your personal motivation for carrying out the enhancement?

"I've a lifelong passion for nature which has resulted in it becoming the subject of my studies and driver behind my career. I was keen to demonstrate to the construction industry that biodiversity provides an opportunity to not just enhance ecological value, but provides cost incentive, PR opportunity and practical solutions" (Hayley Percival, Merseylink Meadow Coordinator)