

Golborne Wetlands
Golborne High School – Wigan, Greater Manchester
J Murphy & Sons

BIG Biodiversity Challenge Award Category: *Community Engagement Project Award*

Project overview

The Golborne Wetlands is a community project within Golborne High School (GHS) grounds that seen a **disused hockey pitch** transformed into a wetland haven. J Murphy & Sons (JMS) commenced the project in 2015 and enhancement of the site has been ongoing for seven years.

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

*Prior to enhancement, biodiversity conditions on site were poor as the site was a developed, sealed surface with **a biodiversity score of zero units**. The site of the wetlands had fallen into disrepair and provided **no value to the students, wildlife or the local community**.*

What were the reasons behind this project ?

JMS were approached by the school to help assist with transforming the old hockey pitch. JMS graduates helped students develop designs that would deliver the following:

- *Increase connectivity for native wildlife..*
- *Provide a **unique learning aid** for GHS to promote biodiversity awareness.*
- *Increase accessibility to green spaces for the residents of Golborne.*
- *Provide an enclosed habitat for protected species such as Great Crested Newt.*

Most of the world's soil carbon is held in wetlands, yet over a third have disappeared since 1970. The Golborne Wetlands fights against climate change by soaking up rainfall, alleviating flooding and storing terrestrial carbon.



Construction of the Wetlands in 2015 with Golborne Students:



2015: Aerial view of the wetlands after initial construction.

What were the biodiversity measures taken?

The following aspects of the project were undertaken by JMS graduates: -

Initial Construction:

- JMS donated operatives, plant and support staff to the project at a value of approximately **£60,000**
- Full removal of the astroturf pitch and creation of a series of ponds, ditches and scrapes
- **Reuse of over 3000 tonnes** of spoil to landscape the wetland.
- Habitat creation through the planting of various wetland species such as bull rush, as well as alder trees donated from a nearby wetland
- Artificial habitat creation using recycled delivery pallets to create bug hotels on the wetlands fringes to encourage invertebrates.
- Development of a **habitat management plan (HMP)**

Ongoing Enhancements:

- Installation of a bird hide for GHS
- Management of pond water levels using JMS supply chain.
- Planting days with students, community and local councillors
- Installation of walkways and bridges for students to access outdoor learning spaces.
- Assisted in delivery of HMP
- Advice on grants and funding opportunities
- Organisation of stakeholder management meetings at JMS offices.

JMS staff have **volunteered over 2500 hours** to the project including tendering, project management and support days.

JMS employees launched an open day at the wetlands alongside students, parents and teachers to discuss biodiversity. Various STEM events have been held at GHS as well as careers fairs where environmental advisors discussed how the management techniques the students learn on the wetlands can be used in a professional capacity in future careers.



2019: Bull Rush and Soft Rush in one of the wetland ponds.



2022: The installed bird hide overlooking a wetland pond, showing the Common Rush planted in 2021

Further information

The site has been monitored consistently over the past seven years, with various ecological surveys completed to document the increase in biodiversity. Latest surveys show that species such as Common darter, Southern Hawker, Painted Lady and Green Veined White butterfly are now using the wetland as breeding ponds. EDNA test were also undertaken and **returned positive results for Great Crested Newt (GCN)**, a European protected species.

The increase in biodiversity can be appreciated by the Golborne Community who can view the ongoing management from the public field. The school also runs an eco group where students use their free time to care for the wetland, an opportunity that gives students valuable experience if considering a future in an environmental field. Some of the activities undertaken are as follows:

- “A Winter Walk” with local feeder schools
- Plastic pick up sessions
- Guest speakers from RSPB teaching how to film and log bird life on the site.

The wetland also forms part of the schools classroom activities with the bird hide having been used as an **outdoor classroom for science and geography**.

The wetland now forms part of the Lancashire wildlife trust green heart regional park and has enhanced the amount of green space and improved water networks in the Wigan area.

Project Team

- J Murphy & Sons, Golborne High School

What was the motivation for carrying out the enhancement?

The motivation was to build a teaching aid for GHS that also benefitted the wider community and beyond. Urbanisation has seen green spaces drastically reduced and this project increases connectivity between the wetlands in the local area (Wigan Flashes). The goals set have created a **biodiversity net gain of 17 units** to date which include reed beds, grassland , hedgerow and trees.

A video of the creation of the wetlands can be found here: <https://youtu.be/sqoGKlreCoc>



2022: Planted trees and shrubs to provide refuge for wildlife.



2022: The largest of the wetland ponds in summer.