

Thirsk Railway Station Biodiversity Improvements

Thirsk, North Yorkshire, UK

TransPennine Express

BIG Biodiversity Challenge Award Category: Habitat Creation: Project of the Year Award (Small scale up to 0.5ha)

Project overview (50 words max)

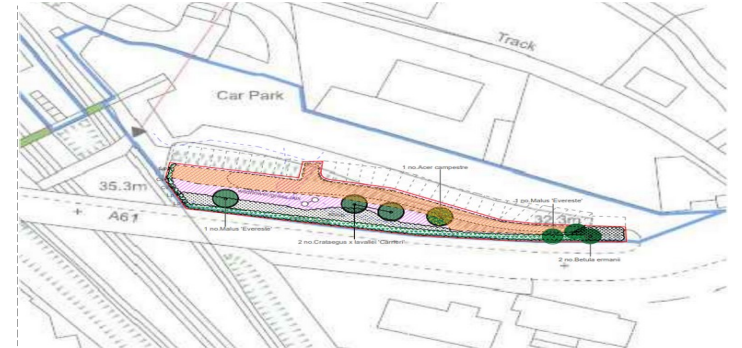
A small-scale biodiversity improvement project entailing 0.1ha of habitat creation, comprising trees, hedgerow, scrub, bug hotels and wildflower grassland at Thirsk Railway Station Car Park. The project also includes community engagement and works were completed in April 2024.

What were the biodiversity conditions on site prior to the enhancement? (100 words max)

Ecological surveys identified Thirsk Station habitats being of low ecological value, supporting few species, with 0.11ha improved grassland the main habitat feature, other than buildings/hardstanding. As with various railway stations, there was little vegetation to fragment hard landscaping and sealed surfaces dominating the site. Whilst not subject to BNG requirements under planning, the Environmental Benefits from Nature tool was used to demonstrate benefits from proposed biodiversity improvements. A primary driver, other than our sustainability strategy goal of a railway that is 'good for nature', was aligning to the Hambleton Local Biodiversity Action Plan, with habitat creation aligned to local objectives.

What were the reasons behind this project? (100 words max)

This biodiversity improvement project was undertaken to support organisational, and wider industry aims of supporting a railway that is 'good for nature'. Improvements were identified within Our Good for Nature Plan, our biodiversity action plan detailing short and long-term enhancements across TransPennine Express. Following business case preparation, we commissioned a local environmental charity to produce a suitable landscape design, delivering the biodiversity benefits outlined within our ecological surveys. Project funding was secured through our annual business plan process. Furthermore, we wanted to support the BIG Biodiversity Challenge and deliver enhanced biodiversity at Thirsk Station to benefit the local community.



Landscape design drawing and planting plan.



New scrub and hedgerow planting on the embankment (March 2024).

What were the biodiversity measures taken? (300 words max)

The following habitat creation measures were undertaken:

- 800m² wildflower grassland.
- 90m native hedgerow.
- 7 trees.
- 175m² native scrub.
- 5 climbing plants screening industrial fencing.
- 5 insect hotels.
- Station planters containing pollinator-friendly species.

The former car park embankment comprised only regularly mown, species-poor, improved grassland. Whilst several stations have limited areas of green space, Thirsk represented an opportunity to significantly improve station biodiversity, with new and enhanced habitats. Furthermore, Our Good for Nature Plan details where replicable habitat creation projects are planned, based upon survey recommendations and suitable land areas.

Using the EBN tool demonstrated enhancements would increase biodiversity value and carbon storage. Additionally, native scrub and trees provide nesting and foraging opportunities for birds, aligning to the Hambleton BAP target of creating areas of scrub favourable for birds. Furthermore, increased wildflower grassland and native flower planters create wildlife areas, again aligning with local strategy within the relevant action plan of the BAP.

Long-term management was considered, with three-year maintenance included within the landscaping contract, comprising wildflower grassland cutting and replacement planting where required. Following this period, maintenance will hand over to TPE facilities support and their in-house landscaping team, ensuring ongoing management.

We were also able to reuse soils during embankment reprofiling, with no materials leaving site as waste. Internal and external engagement was also a key aspect, with TPE staff and supply chain involved in station planter refresh. Externally, for design, we collaborated with local environmental charity, Groundwork, along with Chopsticks, creating insect hotels from reused timber. At a local primary school, pupils learned about the importance of pollinators and filled the bug hotels for Thirsk Station and their school grounds. These engagement activities allowed us to support the local community, whilst subsequently raising awareness on and improving biodiversity, and delivering social value through our engagement and procurement processes.



Signage notifying customers of planned biodiversity improvements.



Area seeded with wildflower mix and use of biodegradable coir matting on embankment (March 2024).

Further information (250 words max) Following scheme approval, the design phase and collaboration with our landscape architect allowed for considered decisions on species selection and ground stabilisation. On-site works during March and April 2024, entailed:

- Enabling works – underground service identification, trial excavations.
- Earthworks – slope reprofiling, soil rotation to prepare for seeding, coir matting installation aiding ground stabilisation and water runoff.
- Planting – manual planting of hedgerow plants, trees, scrub plants and climbing plants, including mulch and guards.
- Seeding – wildflower seeding using native mix, Emorsgate EM2 followed in April 2024 during appropriate weather.
- Planters – including pollinator-friendly species e.g., Ceanothus 'Victoria'.
- Insect hotels – installation following engagement with local charity and school.

With a baseline determined during initial surveys, post-installation monitoring surveys will be undertaken to ensure establishment and assess biodiversity increase. There are also plans for lectern signage, providing information to the local community on habitats and species present. This, combined with local school engagement, helps create a legacy through the creation of habitats for the benefit of local wildlife and passengers, alongside active involvement from local charities and education on biodiversity. With similar habitat creation schemes planned, lessons learned have been captured from the project team and suppliers. These include the need for thorough ground investigation to reduce late changes due to unknown ground conditions, with lessons taken forward for biodiversity improvement projects across our network. Feedback from colleagues and passengers has been excellent and the project brought about increased biodiversity engagement, which will continue with further exciting plans in place for biodiversity improvements across our stations.

Project Team

Client – **TransPennine Express**; Design Team – **Groundwork Yorkshire (consulting services via charity organisation)**; Contractor – **Brambledown**; Charity Organisations – **Chopsticks**, Northallerton.

What was the motivation for carrying out the enhancement? (100 words max)

These biodiversity improvements are not associated with a development or the result of any planning requirements. Our motivation was our sustainability commitment to enhancing biodiversity through our flagship goal of 'good for nature' across our network and to align to wider industry aims of 'a railway for nature' (RSSB Sustainable Rail Blueprint). The rail industry has a unique opportunity to support the natural environment and connect people with nature. Through our 'good for nature' goal and biodiversity action plan we are identifying opportunities to enhance biodiversity at our managed stations, involving colleagues and local communities.



Reprofiling of embankment prior to seeding and planting.



New planting and wildflower seeding on embankment.