

BORDERS RAIL, BAM NUTTALL



BIODIVERSITY ENHANCEMENT OVERVIEW

The aim of the project is the reinstatement of 49km of railway including stations between New Craighall Station near Edinburgh to Tweedbank in the Borders.

The reinstatement of the Borders Railway had the potential to have a major impact on biodiversity. From design stage through to construction, the works have taken nature into account and where possible to enhance for long term benefit.

To date BAM Nuttall have been monitoring up to 162 badger setts under a species protection plan. This has involved the creation of three artificial setts being constructed on route.

Rather than repair all aesthetic masonry defects, we have retained bat roost potential features, with the agreement of the client, saving potential habitats. In addition 100 bat boxes have been installed - to date this tallies to 76 Kent boxes and 24 Schweglar boxes.

To allow the necessary stabilisation of slopes, several trees have been felled resulting in the temporary loss of bird nesting habitat. To compensate this bird boxes have been installed along the route for species such as barn owl and jackdaw. BAM Nuttall are also currently in the process of designing the bird box plan, which will include the erection of over 100 bird boxes including open front boxes; tree creeper boxes and hole boxes for blue tits, sparrows and spotted flycatchers. Additionally, a number of dipper and jackdaw boxes will be installed on and/ or near to structures, with duck boxes near water crossings. We are working with a local men's shed group to reuse our temporary fence posts to create the bird boxes.

Fact box

Company name:
BAM Nuttall

Project name:
Borders Rail

Location:
Falahill, Scotland

Biodiversity enhancement:

- Badger setts and tunnel
- Bat boxes
- Bird boxes
- Otter ledges
- Fish passages
- Wildflower meadows
- Sand Martin burrows

Size:

- 3 badger setts and tunnel
- 100 bat boxes
- Over 100 bird boxes
- 120 Sand Martin burrows

Cost:
N/A

Tips:

- Consider all ecological enhancements at design stage.

Year completed:
2014

Categories:

- Large scale permanent
- Community engagement
- Pollinator

BIODIVERSITY ENHANCEMENT OVERVIEW (cont.)

Mammal and fish passage have been incorporated into all the designs for new structures, where potential species may need assistance. These include otter ledges, baffles to aid fish passage through long culverts and a badger tunnel under the new A7.

A new section of river channel is due to be constructed upstream of the River Tweed SAC. The landscaping plans for this are consistent with the upstream and downstream habitats. River gravels has been salvaged from the redundant channel to ensure river bed is consistent helping to maintain the natural environment.

Enhancement

Where possible all trees on the project have been retained with a buffer strip of wild flower meadow being planted near the cess. In wetland areas, particular in conjunction with the new road schemes wetland plant mixes will be adopted. Several attenuation ponds and drainage/swale channels have been created – new habitat that previously was not present on the route. Landscaping plans are discussed at local community stakeholder groups with all information gather on wildlife shared with the Tween Wildlife Information Centre for knowledge share.

The project, through consultation with SEPA, has avoided the land filling of circa 550,000m³ of excess arisings. This material has been used to restore seven areas (15 hectares) that were agriculturally impoverished or brownfield sites. The latter are to be re-landscaped to form open mosaic habitats, which will expand and support nearby populations of the scarce Grayling Butterfly.

During construction we created habitat supporting 120 burrows of sand martins.

Kerbing on new roads have amphibian and reptile 'dips' to allow safer road crossing.

Pictures of the enhancements

