



B-Lines: Restoring Ryedale's Lowland

The Restoring Ryedale's Lowland Meadows Project is a partnership project between Buglife, North Yorkshire County Council, the Yorkshire Naturalists Union and the Yorkshire Arboretum. It is working with local land-managers to restore and create areas of wildflower-rich meadows, which will act as habitat stepping stones on Yorkshire's B-Lines network. This two year project has restored and created c. 30 ha of wildflower-rich grasslands at sites from Stamford Bridge to Malton, and on to Helmsley.

Background to the Project:

The 'Restoring Ryedale's Lowland Meadows' Project was initiated in August 2012 with the aim of restoring and creating wildflower-rich grasslands within a defined stretch of the Yorkshire B-Lines.

The project worked with a number of land owners and land managers who identified areas of land where existing grasslands could be enhanced, or where new meadows could be seeded. The project worked on eight individual sites, including two arable fields, a churchyard and several species-poor grasslands.

A range of management activities were undertaken to increase the range and diversity of wildflowers and the insects pollinators which rely on them for food.

Lowland Meadow creation

Work to create new wildflower-rich Lowland Meadows was undertaken according to guidelines provided in Buglife's B-Lines Fact Sheet No 3. Work included:

- Soil samples were taken to ensure soils were suitable for meadow creation.
- Firm seed beds were created which were free from perennial weeds
- Seed was harvested from nearby species-rich hay meadows, or alternatively sourced from a reputable seed supplier.
- Seed was sown in early autumn
- Intensive management of the newly sown grasslands in the first year, including a programme of cutting and removal of vegetation

Key aims of the project

- **To restore and create approximately 30 ha of wildflower-rich Lowland Meadow**
- **To reduce habitat fragmentation by restoring and creating 'stepping stones' of habitat**
- **To aid species movement/dispersal**
- **To help conserve populations of insect pollinators**



Seed sowing ©Paul Evans



New Lowland Meadow © Leanna Dixon



Seed harvesting © Emorsgate Seeds

carried out in spring and summer of 2013 and 2014. These transects will be repeatable in future years, and over time will demonstrate the impact of the new meadows.

After two years of intensive grassland management, the long-term management of the project sites will now return to the land managers. The majority of the land will be managed as



Meadow Brown © Leanna Dixon

part of livestock farming systems, providing both hay and animal grazing. Land at the Yorkshire Arboretum, Castle Howard, will be managed specifically to encourage more insect pollinators and other wildlife.

Meadow Restoration and enhancement

As part of the Ryedale project several species-poor grassland areas were also enhanced/restored through over-seeding with wildflower seed. Works on these sites followed guidelines in B-Lines Fact sheets Nos 2 & 3., notably:

- Mechanical scarification of ground to create areas of bare ground to act as niches for seed germination
- Seeding in autumn followed by rolling or grazing to push seed into contact with soil
- A managed programme of cutting or grazing to help new seedlings establish in the following spring/summer.

Monitoring and management

Baseline surveys of plants and invertebrates (Diptera and Aculeates) were carried out on each of the project sites by project staff and local entomologists. Over 250 invertebrate species were identified including 11 bumblebees and 18 butterfly species.

In addition to the baseline survey work butterfly/bumblebee transects were set up across all project sites, and monitoring

Summary

- Approximately 30 ha of wildflower-rich lowland meadows have been created or restored
- Although the new wildflower-rich grasslands will take many more years to develop they are already being visited by a range of insect pollinators
- We will continue to look to work with landowners in the area to do further work and build the B-Lines



Grassland restoration © Paul Evans



Restored grassland © Leanna Dixon

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