Tees Valley Biodiversity Partnership

Brownfields
Habitat Action Plan

Plan Lead Organisation	INCA
Plan Coordinator	Robert Woods
Action Group	Urban
Associated Plans	Brownfield butterflies, brown hare, barn owl, grey partridge
Latest version	Published February 2009

Description

Brownfield, waste land, derelict land, post industrial, disused or brownfield land are terms given to describe sites that have, in the recent past, been used for some development purpose, and are in many cases still in industrial ownership. They include abandoned quarries, slag and spoil heaps, disused railways, landfill sites and other land where industrial or commercial activities have taken place. In the Tees Valley there are many sites in current industrial use which fit into this definition. A great range of physical and chemical characteristics can exist within a single site, and also between different sites in close proximity. Varying characteristics include soil pH, soil contaminants, topography, fertility, drainage and aspect, sunlight and shade. Cycles of disturbance and abandonment, artificial structures, uneven ground, wet and dry areas and poor soils often result in a mosaic of habitats that support high levels of biodiversity and are especially important for many invertebrate species, reptiles and amphibians.

The biodiversity of brownfields has in the past been underestimated. They are often rich in biodiversity and form an important refuge for wildlife in what can be an otherwise heavily urbanised industrial landscape. Brownfield sites are especially important for mammals such as the brown hare, birds such as the grey partridge and skylark, amphibians and many invertebrate species. In recognition of its importance open mosaic habitat on previously developed land was made a national BAP priority habitat.

Current factors causing loss and decline

- Pressure to redevelop brownfield land for housing and commercial uses.
- Inappropriate landscaping to “tidy up” sites can destroy wildlife habitats.
- Lack of awareness of the biodiversity value of sites and understanding of brownfield management techniques.

- Negative public perception of sites as unsightly and prone to antisocial activities, fly tipping and vandalism.
- Lack of management, leading to loss of biodiverse open, early successional habitats.

Conservation Status

Open mosaic habitat on previously developed land is a UK priority habitat
No legal protection of habitat but individual species associated with the habitat may be protected.

The Habitat in the Tees Valley

The industrial history and current industrial activities of the Tees Valley provide a large number of sites that are rich in biodiversity. The Brownfields HAP for the Tees Valley is somewhat complex in nature, since it covers areas that are part of the landholding of currently operating industrial sites as well as disused post-industrial land which has in the recent past been used for some development purpose, but now exists without any formal use.

In the lower Tees Valley, the substrate is typically a weathered blast furnace slag, consisting of calcium silicate, which was used for reclamation of coastal and estuarine areas. This gives rise to a very specialised flora, which is more commonly associated with limestone. The established open grasslands are usually dominated by fine-leaved grasses containing a diverse range of wild flowers, areas of bare ground and scrub. Such areas are locally termed as 'slag grassland'. These grasslands provide a habitat for dingy skipper and grayling.

In addition, there can be other habitat types, such as reedbeds, ponds and saltmarsh. Extensive areas of these additional habitats are considered for the purpose of the Tees Valley BAP within their own respective HAP.

Current activity in the Tees Valley

The Industry Nature Conservation Association (INCA) is based in the Tees Valley. It is a non profit-making organisation which has a membership that spans industrial organisations, statutory agencies, local planning authorities and wildlife conservation organisations. This enables INCA to play a leading role in the Tees Valley relating to the survey and conservation of wildlife associated with industrial sites. They provide support to a number of businesses to enhance the interest features of their landholdings using the process of site-based Industrial Biodiversity Action Plans.

Some brownfield sites are now nature reserves, such as Maze Park and Gravel Hole, which are managed by the Tees Valley Wildlife Trust.

Further Information

Butterfly Conservation, 2007, Brownfields for Butterflies.

INCA, 2004, Bridging the Gap between Industry and Nature -15 Years of Sustainable Development for the Tees Valley.

INCA, 2008, Butterflies of the Tees Valley and Humber Industrial Sites.

Lawrence, I.,1994, A Guide to the Wild Flowers of Cleveland, Cleveland County Council.

Parham.M., 1996, The State of the Natural Environment of the Tees Estuary.

Whitehouse. A.T., 2008, "Managing aggregate sites for invertebrates- A Best Practice Guide", Buglife.

Vision Statement

For the value of brownfield biodiversity to be more widely recognised, and to maintain a dynamic network of brownfield sites that are managed to maximize their biodiversity interest

Targets

B.T1 Identify areas of brownfields that have significant value for biodiversity.
Goal: Produce a GIS data base of biodiverse brownfield sites that can be updated annually.

B.T2 Increase extent of early successional open mosaic habitat by carrying out on site. management work.
Goal: A goal will be set after target 1 achieved.

Actions

Code	Action	Organisational lead	Action contact	Partners	End date
B.A1	Identify areas of brownfield land with significant biodiversity interest by producing an inventory of the known sites, with information on location, extent, habitat type, ownership, management and associated survey information.	INCA	Robert Woods	TVWT	End April 2009
B.A2	Start monitoring programme of moths on brownfield sites at 4 locations.	INCA	Robert Woods		Ongoing
B.A3	Raise awareness of brownfield biodiversity amongst Tees valley industries by the production of information leaflets on Dragonflies and Damselflies (2009); Day Flying moths (2010); Flora of Slag Grassland (2010).	INCA	Ken Smith (Odonata); Robert Woods (Moths); Geoff Barber (Flora)		April 2009 (Odonata); April 2010 (Moths); April 2010 (Flora)
B.A4	Work with 5 businesses to develop a site-based industrial BAP which has a mechanism for review and update of targets / actions.	INCA	Robert Woods Geoff Barber (Corus)	-Huntsman Tioxide -Cleveland Potash -Corus -BP CATS -Lucite	April 2009 April 2009 Dec 2009 April 2009 April 2009
B.A5	Identify and protect the most important sites through Local Sites designation review.	TV BAP steering group	Jeremy Garside	TVWT Middlesbrough BC, Stockton BC, Hartlepool BC, Redcar and Cleveland BC	2012
B.A6	Carry out land management activities to recreate or maintain open successional habitats on 4 sites owned by industrial organisations within the INCA membership.	INCA	Robert Woods Geoff Barber		Ongoing
B.A7	Carry out habitat management work for early successional habitats and associated species on Brownfield Nature Reserves (e.g Maze Park, Portrack Marsh).	TVWT	Jeremy Garside		Ongoing
B.A8	Investigate the potential of disused railways and railway sidings for biodiversity by gaining permission and carrying out initial survey of plants and butterflies.	TVBP	Sue Antrobus		Sept 2009