

# Thames Terrace Grasslands

*“one of the most important and threatened assemblages of invertebrates in Britain”*

Thames Terrace grasslands can be found in the East Thames Corridor, notably in Havering and Thurrock. They are remarkably rich in insects and other invertebrates, including many rare and scarce species. Unfortunately, because they often occur on ‘brownfield’ sites and their value is not obvious to the untrained eye, they can easily be overlooked. Given the enormous development pressures in the area, they are therefore at high risk of being destroyed or damaged inadvertently.

That is why the Havering Wildlife Partnership and the Essex Biodiversity partnership are organising surveys to pinpoint the most valuable areas and are working to make sure that these are protected and that their wealth of biodiversity survives and prospers.

## Why are they so special?

The East Thames Corridor has a combination of climate, geography and ecology that is unique. It lies in one of the driest parts of Britain. In summer it has high levels of sunshine and in winter the influence of the Thames ensures mild temperatures.

Over many thousands of years the River Thames has deposited sediment within its flood plain. Variations in climate during the Ice Age changed its course and as a result the river laid down a number of terraces of sand and gravel at different levels. Some of these have been buried and others mined extensively, but exposed patches still remain.

Soils on top of Thames Terrace gravels are usually mineral-deficient, friable and dry. A flower-rich, drought-stressed vegetation develops and, because the soil is poor in nutrients, succession to scrub or woodland does not take place, or takes place only slowly. The resultant mosaic of vegetation structure and topography is of great importance to many rare and scarce species of insects and other invertebrates, and also provides the bare and sparsely vegetated ground in sunny situations required

by many species for nesting. Combined with a lack of management other than sporadic disturbance, this allows a continuity of forage and nesting habitats throughout the season and from year to year. Over time, a complex and extraordinarily valuable community of invertebrates develops.

**Below left Sand cliff at Hunts Hill**

**Below right Flowers at Mill Wood pit  
Sunny slope at Mucking Heath**



## Which insects live there?

On the right are some of the rare insects that can be found on Thames Terrace Grassland sites. The three at the top are national Biodiversity Action Plan species – species identified as top priority for conservation action. Many of the rarities are bees and wasps but there are also a significant number in other groups such as the spiders, beetles, flies and bugs.

At one Thames Terrace Grassland site in Thurrock now almost completely destroyed by housing development, the Invertebrate Index (a measure of the biodiversity and rarity of the insects present) was greater than that of Salisbury Plain, a vastly greater area of acknowledged national importance in Britain.

## How can they be protected?

Havering Wildlife Partnership and Essex Biodiversity partnership are working closely with local planning authorities to make sure that as many of the important sites as possible are identified and designated so that harmful development can be prevented.

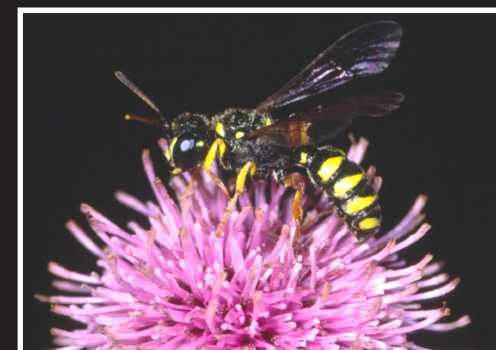
But it is equally important that these valuable sites should be managed correctly, to provide a continuity of forage and nesting habitats throughout the season and from year to year. For example, cutting of vegetation at any time in the summer may deprive some species of forage at a critical time so it is vital that compartments should be cut on a rotational basis. We are also advising the owners and managers of Thames Terrace Grassland sites on the best ways to look after them and their valuable insect residents.



Shrill carder bee *Bombus sylvarum*



Picture-winged fly *Dorycera graminum*



Solitary wasp *Cerceris quinquefasciata*



Solitary bee *Andrena fulvago*



Blue carpenter bee *Ceratina cyanea*

Produced by Havering Wildlife Partnership (contact Peter Harvey 01375 371571)

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