

# The state of brownfields in the Thames Gateway: Project summary Jamie Robins, Sarah Henshall & Alice Farr 2013



**Thames Gateway brownfields are havens for wildlife, supporting nationally important populations of rare and scarce invertebrates. However, brownfields are increasingly under pressure from development, threatening the future of this important fauna. 'The state of brownfields in the Thames Gateway' report demonstrates the high rate of habitat loss, with 100 of 198 wildlife-rich brownfields lost over a six year period. This unsustainable and rapid loss of habitat is likely to have serious implications for the region's invertebrates.**

## Thames Gateway brownfield invertebrates

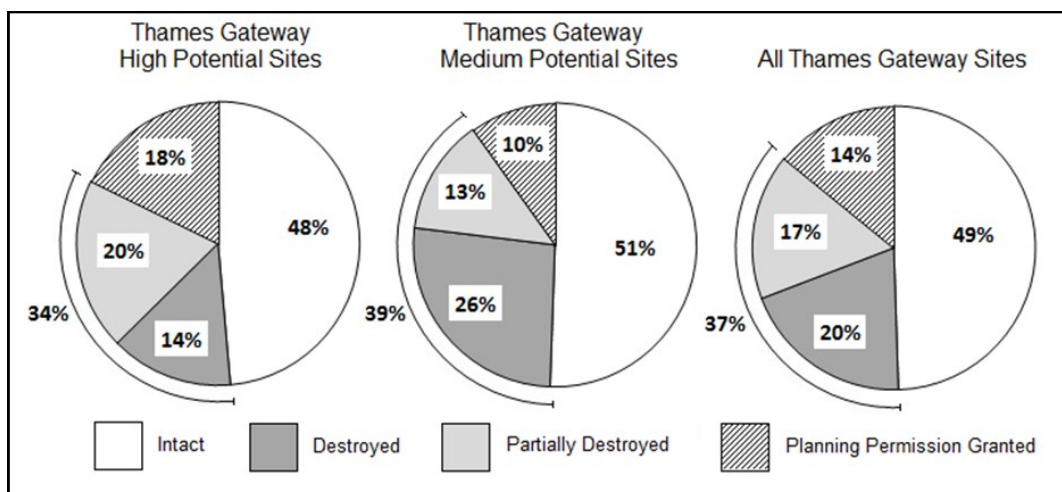
Brownfields can support a huge range of species. Wildlife-rich brownfield sites develop as a result of abandonment and periodic disturbance, combined with low-nutrient content soils and introduced substrates, such as Pulverised Fuel Ash (PFA) and sandy river dredgings. This results in changes in hydrology and pH, preventing fast growing species from becoming dominant. Even small sites can contain mosaics of habitats, essential to the survival of many invertebrates due to modern declines of more natural habitats, such as flower-rich grasslands. Brownfield sites are becoming increasingly important within ecological networks, providing refuges and linkages between other more traditional habitats to sustain biodiversity.

At least 15 priority species are strongly associated with brownfield habitats in the Thames Gateway, including the Shrill carder bee (*Bombus sylvarum*) and Brown-banded carder bee (*Bombus humilis*), as well as some of which are found nowhere else in the UK, such as the Streaked bombardier beetle (*Brachinus sclopeta*) and Distinguished jumping spider (*Sitticus distinguendus*). Thames Gateway brownfields support over 100 Red Data Book (RDB) species, over 400 Nationally Scarce species, and a remarkable 74% of the national fauna of bees and wasps (Harvey 2000; Buglife 2008).

However, the Thames Gateway is Europe's largest regeneration area and the UK's largest economic programme, with the aim of creating 110,000 new homes and 225,000 new jobs (Department for Communities & Local Government 2007).

## All of a Buzz in the Thames Gateway

Between 2005 and 2008, Buglife collaborated with English Nature (now Natural England) on the 'All of a Buzz in the Thames Gateway' (All of a Buzz) project. The project mapped over 6,900 hectares of brownfield and assessed the ecological value of 450 sites, in terms of their potential to support rare and scarce invertebrates. The key finding was that 198 sites (over 40%) showed High or Medium potential for invertebrate biodiversity.



Pie charts showing proportions of Thames Gateway sites that are intact, destroyed or with a planning permission granted

## Methodology

Buglife have since revisited the All of a Buzz dataset to quantify the rate of loss of sites valuable to invertebrates, since their assessment between 2005 and 2007. Using aerial imagery and ground-truthing, the 198 sites previously identified as being of high and medium importance for invertebrates were categorised as being either intact, partially destroyed, completely destroyed or having planning permission granted (where invertebrate interest is likely to be lost).

## Results

Over a six-year period, over half (51%) of important brownfields within the Thames Gateway had been lost, damaged or were under immediate threat. Of 198 sites revisited, only 98 remain intact and free of immediate threat. The regional breakdown identifies that London has the highest rate of development with over two thirds (69%) of sites lost, damaged or with an outstanding planning permission. Ground truthing suggests this is likely to be an under estimate.

## Discussion

Development and regeneration are undoubtedly resulting in the loss of wildlife-rich brownfields across the Thames Gateway. 100 of the 198 sites identified in the original 'All of a Buzz in the Thames Gateway' project as being of High or Medium potential for invertebrates between 2005 and 2007 were found to be lost or at immediate risk. The failure to protect over

50% of the sites reviewed demonstrates that there is insufficient protection of high value brownfield sites.

The loss of swathes of high quality habitat is likely to have a significant impact on the rare invertebrates of the Thames Gateway. The loss of varied features and habitats across the landscape runs the risk of rare species being completely lost from the regional and national fauna.

This report highlights that the planning system does not deliver safeguards for brownfield habitats and invertebrates, and calls for greater protection and consideration of their value. The rate of development on brownfields is highly unsustainable, and without change, losses are likely to continue.

## Recommendations

- Higher level protection of biodiverse sites
- UK wide inventory of Open mosaic habitat on previously developed land
- Local authorities need to identify and designate key sites
- Appropriate survey and assessment is essential to underpin planning decisions

## References

Buglife (2008) *Brownfields: a natural asset. A guide to the sustainable reuse of wildlife-rich brownfield land in the Thames Gateway*. Buglife, Peterborough.

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Harvey, P. (2000) The East Thames Corridor: a nationally important invertebrate fauna under threat. *British Wildlife*, 12, 91-98

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