

Brownfield? Greenfield?



London

The threat to London's unofficial countryside

A report by London Wildlife Trust on behalf of the London Brownfields Forum



Protecting Wildlife for the Future



“..... You don’t need to be an ecologist with a passion for immigrant plants to enjoy a bit of ragged and exuberant greenery, where no-one tells you to keep off the grass or to stop picking the flowers. Yet your chances of so doing get fewer by the day. Increasingly the so-called brownfield sites are barricaded by razor wire and guard dogs, as if they contained some delicate crop. What they do contain, of course, is something much more robust and precious – a whole urban ecosystem of majestic trifids, migrant birds, opportunist animals and feral children.”

Extract from ‘The Unofficial Countryside’ by Richard Mabey (1999 edition)

Richard Mabey, author of the recent classic Flora Britannica, is a contemporary spokesperson for the modern landscape and its enthusiasts. “The Unofficial Countryside”, first published in 1973, is a celebratory account of the unique mix of London’s wildlife and human communities.

London’s brownfield sites host a wide range of animals and plants, some of them nationally rare and many of them truly characteristic of a cosmopolitan London. This ‘unofficial countryside’, now under pressure from development, is as much a part of the living London as Hampstead Heath, Richmond Park and Epping Forest. I therefore welcome London Wildlife Trust’s initiative in raising this important issue. The need for new development, particularly in the Thames Gateway, needs to be tempered with a rigorous sustainable approach that takes account of the environmental and social merits that many brownfield sites hold. *Brownfield? Greenfield?* should help those working to regenerate London and make it an environmentally richer place in which to live, work and play.

Sir Martin Doughty
Chair of English Nature

This report reveals the complexities behind a simplistic view of the brownfield versus greenfield debate. It highlights the fact that some brownfield sites are more important for wildlife than their intensively-managed greenfield counterparts and makes the case for their selective preservation as a community resource. These brownfield sites have become crucially important places for people and wildlife, reconnecting urban communities with nature.

Professor Peter Crane FRS
Director of The Royal Botanic Gardens, Kew

the colour of fields



Imagine you are walking through a field in summer. Leaves rustle in the breeze and long grasses brush your legs. Butterflies settle on brightly coloured flowers. Chiffchaff and wren call out and a blackbird searches for food under a hawthorn bush, unaware of the kestrel overhead.

You might think you were in the heart of the countryside. But you could equally be in the middle of London, where urban wastelands bring city people closer to the natural world. What we mean here by wasteland is previously-developed land that has been abandoned by people and reclaimed by nature. This is some of London's most valuable and dynamic natural open space: part of the city's unofficial countryside.

In this report, we aim to demonstrate that urban wastelands are far from being wasted assets. They often support a rich array of wildlife and provide people living and working in urban areas with the opportunity to experience nature on their doorsteps. This is particularly important where public access to other local green open spaces is very limited. Brownfield sites (the term used by developers and planners to refer to previously-developed land) are often more natural and full of wildlife than many greenfield sites.

London Wildlife Trust supports the need for positive action to revitalise parts of our city. But the government's commitment to prioritise brownfield sites for development has already resulted in the loss of wasteland sites recognised in London for their wildlife importance.

We believe that a more sustainable approach to brownfield development is essential. It must recognise the significant biodiversity of many of these sites and the role they offer in the provision of green open space for local communities. London Wildlife Trust thinks this approach is realistic, despite the many pressures on these sites for new development.

This report:

- Examines the social and environmental value of urban brownfields
- Outlines current policy affecting brownfield land
- Proposes urgent action to protect London's finest brownfield wildlife

brownfield or greenfield?



London has the chance of a brighter future. Central government is committed to an urban renaissance to create vibrant liveable cities. At the same time, London's regional government, the Greater London Authority, has the opportunity of working on behalf of the whole city.

London Wildlife Trust believes that any talk of urban renaissance must recognise the value of natural areas that already exist. A significant element of the Government's proposals is the prioritisation of brownfield sites for development. By 2008, 60% of new housing should either be built on brownfield sites or created from property conversions. Yet, about a quarter of London's 1,200 wildlife sites¹ are wholly or partly brownfield in character. And seven of inner London's Sites of Metropolitan Importance², which were designated for their wasteland biodiversity, have now been destroyed or so damaged that they no longer merit such wildlife status. London's remaining brownfield sites with the most valuable wildlife must be saved.

The government's brownfield targets accentuate the 'brownfield versus greenfield' debate. This tends to focus on meeting house building targets, protecting the greenbelt and preventing urban sprawl. Yet, much of our countryside has been polluted and damaged by industrialised farming methods. In many areas, such as rural Essex, the countryside is dominated by endless tracts of featureless prairies. These are technically green fields but they are often sterile areas for people and wildlife. Similarly, our greenbelt land, strongly protected against development by planning policy, is often inappropriately managed and of low wildlife, landscape and recreational value.

In contrast, urban brownfields can be very rich in wildlife, providing a refuge for many plants and wild animals. These colourful wasteland communities, that spring up spontaneously wherever land is abandoned, are one of the few remaining truly natural types of habitat in the country. The contrast of natural and industrial heritage can be strikingly attractive and interesting. But the opportunities it offers for recreation are often ignored.

Not all brownfield sites have a high wildlife and amenity value. Certain sites, such as areas of hard-standing, car parks and existing empty buildings, should be targeted for redevelopment first. In other cases, creative mitigation can allow redevelopment to go ahead without the destruction of local wildlife characteristics. We need to recognise the potential contribution of these sites in areas with very limited natural open space.

1. London's wildlife sites have been surveyed and assessed using procedures recommended by the London Ecology Unit, and now adopted by the London Mayor and the Greater London Authority's Strategy Directorate. 2. Sites of Metropolitan Importance are sites which contain the best examples of London's habitats, sites which contain particularly rare species, rare assemblages of species or important populations of species. They are of the highest priority for protection.

Important Inner London wildlife sites lost to development;

**Thames Wharf and the
Limmo Peninsula**
Newham

Deptford Wharf
Lewisham

Klein's Wharf
Tower Hamlets

Bricklayers' Arms
Southwark

Spitalfields Viaducts
Tower Hamlets

**Woolwich Arsenal and
Tripcock Park**
Greenwich

Barking Levels
Barking and Dagenham

natural redevelopment



Wastelands have always had a chequered history. They appeared because of accident, politics or economic failure and often disappeared just as unexpectedly. But today, more wastelands are being lost to development than are being created. And this means that the unique wildlife features of some of our existing sites are even more precious.

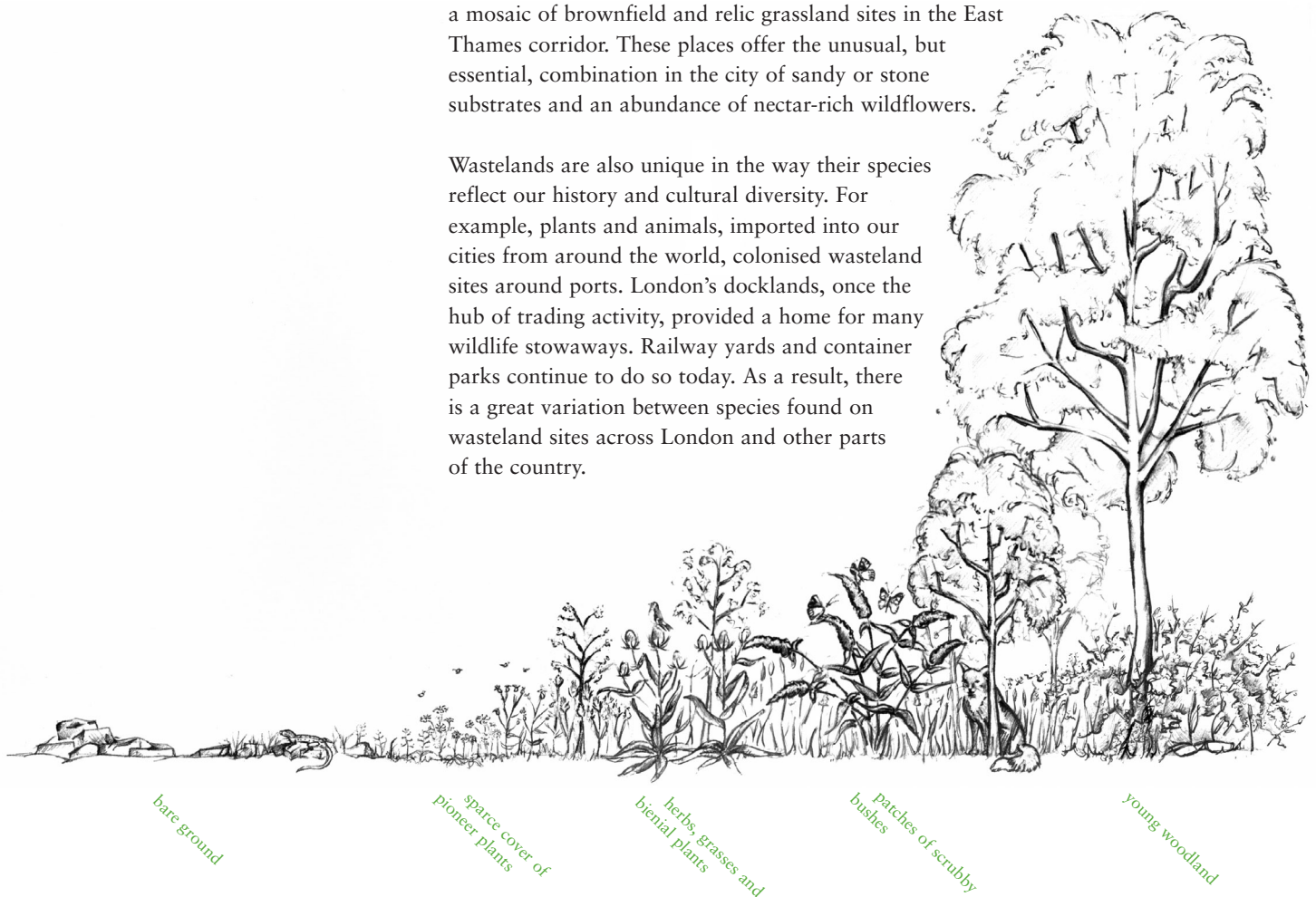
The illustration below indicates how the process of natural colonisation can work on brownfields. It shows that wasteland or brownfield habitat can be very varied: from sparsely vegetated ground to areas of relatively mature trees and shrubs. In this report, brownfield biodiversity refers to all of these types.

Substrate conditions and the level of human activity strongly influence the pattern of colonisation. On larger brownfield sites there may be a variety of wildlife communities at different stages of natural colonisation.

This can result in an amazing array of plant-life, which in turn encourages foraging and nesting birds, including linnet, goldfinch, skylark, song thrush and kestrel. In London, these dynamic landscapes have also attracted a rare bird in the UK, the black redstart. Other animals that make use of urban wastelands include fox and bats, as well as butterflies, grasshoppers and slowworm.

The diverse origins of urban brownfields can result in wildlife species that would be the envy of many rural nature reserves. Certain nationally-important invertebrates, such as the 'humble bumble', *Bombus humilis*, are virtually restricted in London to a mosaic of brownfield and relic grassland sites in the East Thames corridor. These places offer the unusual, but essential, combination in the city of sandy or stone substrates and an abundance of nectar-rich wildflowers.

Wastelands are also unique in the way their species reflect our history and cultural diversity. For example, plants and animals, imported into our cities from around the world, colonised wasteland sites around ports. London's docklands, once the hub of trading activity, provided a home for many wildlife stowaways. Railway yards and container parks continue to do so today. As a result, there is a great variation between species found on wasteland sites across London and other parts of the country.



natural space for people

The Ripple

Set amongst the new industrial landscape of Barking Reach in east London, the London Wildlife Trust's Ripple Nature Reserve is a fascinating example of how nature can reclaim industrial wasteland. It is a mosaic of colourful habitats that include natural colonisation over areas of pulverised fuel ash dumped from a former local power station.

Over the next few years, the reserve will be surrounded by the Thamesview estate and the new Barking Reach residential development – built on land designated as a Site of Metropolitan Importance for Nature Conservation. The Ripple will become an increasingly important resource for the local community, as the nearby natural open space is lost to development.

There is increasing evidence that we benefit from contact with nature as part of our everyday lives. Easy access to natural green space makes us feel better, both physically and mentally.

These benefits have been acknowledged by the London Mayor, who proposes in his Biodiversity Strategy that all Londoners, wherever they live or work, should be within walking distance of a quality natural space. In many built-up areas, particularly in inner London, wastelands and other brownfield sites may be the only natural greenspace there is. They are our unofficial countryside: an escape from the noise, bustle and pollution of London and, if properly managed, they could help significantly to reduce the number of areas deficient in accessible open space.

Clearly, not all urban wasteland sites meet these needs. Some are perceived to be unsafe, unappealing and the focus for anti-social activity. In some cases in London, the value of wastelands has been recognised and they are being actively managed as wildlife sites for the benefit of local communities. Other wastelands are more likely to be inaccessible to the public and targeted for development. Their potential to fulfil a much-needed function for people and wildlife is unrecognised or ignored by both planners and developers.



contamination and creative remediation

Many brownfield sites remain contaminated as a result of their previous industrial use and are a threat to public health and safety. Yet it is often these abandoned sites, with their unusual substrates, that host distinctive plants.

We realise that remediation work required to make contaminated sites safe is a costly and complex obstacle to redevelopment. We agree that health and safety issues must be tackled. But the impact of remediation and redevelopment on wildlife must also be considered early on. Mitigation, in the form of innovative wasteland habitat creation, may be one option for compensating loss of existing biodiversity.

At a former Transco site in Deptford, L.B. Lewisham, contaminated ground has been tackled in preparation for a new education and visitor centre. The top half metre of contaminated substrate has been removed and replaced with crushed brick and concrete as remediation to allow the local flora and fauna to recolonise naturally.

undervalued and ignored

The wildlife value of brownfield land is often unrecognised, despite the biodiversity of even the smallest sites.

London is fortunate to have a relatively good history of habitat surveying across the boroughs. Small wasteland sites, however, have in the past, been under-sampled because they fell below the size threshold of accepted survey methodology. The biodiversity of newly abandoned wasteland can also develop quickly but its value may not be acknowledged if a habitat survey is not due for several years.

Ecological research and the evaluation of wasteland habitat has lagged behind that of more conventional semi-natural habitats of the British countryside. As a result, nature conservation professionals consistently undervalue wasteland sites.



ecological surveying of London's existing green roofs

Gargoyle Wharf

This is a classic wasteland site next to the River Thames in the London Borough of Wandsworth, and once a proposed Site of Metropolitan Importance for Nature Conservation. It was the subject of at least three major planning applications in the past six years and vigorous local campaigning for the open space to be retained. Over 250 different species of higher plants were recorded on the site before it was bulldozed.

As we have explained, the government has set targets for building homes on brownfield or previously-developed land. These are contained in Planning Policy Guidance Note 3 (Housing), which defines what is meant by '*previously-developed*'. This definition specifically excludes the following: '*land that was previously developed but where remains of any structure or activity have blended into the landscape in the process of time (to the extent that it can reasonably be considered as part of the natural surroundings), and where there is a clear reason that could outweigh the re-use of the site – such as its contribution to nature conservation*'.

This exclusion clause has offered a 'safety net' to a few mature brownfield sites and has led to a more sensitive approach to redevelopment. However, most urban wastelands are at earlier stages of colonisation and do not meet the conventional idea of 'blending in'. These wastelands tend to be viewed instead as unsightly wildlife deserts, when in fact they can be of the highest wildlife value. London Wildlife Trust believes that if this value were recognised by environmental professionals these sites could be saved or mitigation made for their loss.

threats and opportunities

Some influential reports, policies and strategies are shown here. Some have increased pressure on London's unofficial countryside; others offer exciting opportunities.

Urban White Paper

The Urban White Paper (2000), *Our Towns and Cities: The Future - delivering an Urban Renaissance* adopted many of the recommendations of the Urban Task Force's 1999 report, particularly the prioritisation of new development on brownfield sites. The White Paper's emphasis on social and economic issues and its relative weakness on the environment and wildlife may contribute to many of the problems highlighted in this report.

Sustainability Indicators

A government headline indicator for sustainable development is the percentage of new homes built on previously developed land. This indicator will not measure the percentage of urban wildlife sites destroyed or damaged as a result.

Planning Policy Guidance 3 (housing)

The government says we need 3.8 million new homes in England by 2021 and many of them should be built on brownfield land. PPG3 has increased the pressure for development on urban brownfields, many of which are unique colourful city sites, teeming with life.

Planning Green Paper

Planning: delivering a fundamental change (2001) sets out the Government's proposed reforms to the local planning system. Proposals include the creation of business zones in all regions, where certain development could proceed without planning permission. These zones are likely to be on brownfield sites, particularly if the strong lobby against greenbelt development persists.

Unitary Development Plans

The London boroughs often fail to adopt individual brownfield wildlife sites in their Unitary Development Plans. Subsequently, biodiversity is more likely to be ignored or undervalued when development proposals are being considered by the local planning process.

English Partnerships

In a recent review, this government agency was re clothed as the brownfield regeneration body for England. Its key objectives include the identification and prioritisation of strategic brownfield land and management of demonstration projects. At this stage, its precise role and policies are unclear.

Biodiversity Action Plans

The UK government signed the Convention on Biodiversity at the Earth Summit in 1992. Countrywide targets and action plans to conserve priority species and habitats have been published. But these plans fail to acknowledge the significance of urban brownfields, particularly when some of the priority species depend on wasteland habitat.

threats and opportunities

New strategies for London

New duties for the London Mayor include the preparation of a Spatial Development Strategy (The London Plan) and a Biodiversity Strategy. *The London Plan* replaces the current strategic regional planning guidance for London and will be the ‘conductor’ of the Mayor’s other strategies. Development plans produced by the London boroughs should conform to *The London Plan*.

The draft Biodiversity Strategy identified wastelands as sites of value to London’s biodiversity and acknowledged that they were declining due to economic pressures. It noted that: “a balance is needed between the need to concentrate new housing into brownfield land, and the importance of some of this land as wildlife sites”. Unfortunately, this call for balance was not reflected in *The draft London Plan*, where brownfields were mentioned only in relation to their potential for development.

Planning Policy Guidance 17 (sport and recreation)

Newly revised PPG17 emphasises that local authorities should ensure that they meet the needs of communities for open space. We believe brownfield sites need to be recognised for the contribution they can make to an area’s overall open space resource.

London Development Agency

The Government is also looking to the regional development agencies to help achieve its target for house building on brownfield sites or through property conversions. However, one of the London Development Agency’s statutory responsibilities is to contribute to sustainable development. It is well-placed to promote the additional social, economic and environmental values of integrating appropriate wasteland features into new developments.

Thames Gateway London Partnership

The brownfield resource of the Thames Gateway has been recognised as the “largest in the capital” (Nick Raynsford). The Thames Gateway Partnership is an alliance of stakeholders from the public, private and community sectors, working towards regeneration of the sub-region. A key objective of the partnership is overcoming obstacles to brownfield redevelopment.

Urban Green Space Task Force

The Government’s Urban Green Space Task Force was established in 2001 following a pledge in the Urban White Paper to establish a comprehensive programme to improve the quality of urban parks and open spaces. This is an excellent opportunity to embrace local biodiversity and the potential value of brownfield sites in the urban green space network.

London’s Wasteland Biodiversity Action Plan

The London Biodiversity Action Plan (2001), published by the London Biodiversity Partnership, includes a habitat action plan for wastelands. The three aims of the action plan are:

- To highlight the important value of London’s wastelands for people and wildlife
- To maintain a diverse network of wasteland sites
- To promote the retention, incorporation, enabling and management of

wasteland habitats within new developments in London

The London Wildlife Trust is the lead organisation for the wastelands habitat action plan and, along with the London Brownfields Forum, it takes the lead role for specific actions identified in the plan. The London Brownfields Forum was

developing with wildlife

urban design - grasping the nettle

Developers are increasingly undertaking ecological surveys and evaluations as part of brownfield development proposals, whether or not an assessment is legally required.

While this should be encouraged, proposals for environmental enhancement or mitigation on brownfield sites far too often involve tree-planting or other 'greenwash' landscaping. This may be inappropriate to the existing local landscape character and ecological context. Tree-planting and standard amenity grassland is too often seen as an easy solution to greenspace provision.

Guidelines on good practice for urban building design already exist but they do not tend to acknowledge the option of designing with wildlife. Supplementary Planning Guidance is being developed for the Mayor's *London Plan* on the issue of sustainable design and construction. This must adequately reflect the value of wasteland biodiversity and encourage more imaginative design that incorporates urban wildlife features.

brownfield landscaping at Deptford Creek

At Deptford Creek in south London, projects funded by the Single Regeneration Budget have successfully raised awareness of brownfield biodiversity. Here, planners and developers are producing renewal programmes that celebrate rather than ignore the distinctive creekside wildlife. Local materials will be used within the landscape design of new developments to encourage natural colonisation of existing plants and animals. For example, many of the buildings will have green roofs, using crushed bricks and concrete as the substrate. When completed, Deptford Creek will have the largest concentration of 'eco-roofs' in the UK.

demonstrating alternative management

Braeburn Park Nature Reserve is a new nature reserve on a former brownfield site in Crayford, LB Bexley. It is a good example of a site actively managed to conserve rich and varied brownfield biodiversity.

The reserve has a history of sand and gravel extraction and has been used since the 1960's mainly for recycling waste building materials. As a result of a planning agreement between Bexley council and the developer, London Wildlife Trust will receive the freehold of the open space and a sufficient endowment to cover maintenance costs of the reserve in perpetuity.

sustainable development

It is ironic that the destruction of urban brownfield wildlife sites is contributing to the government's targets for sustainable development (see Sustainability Indicators). The benefits of retaining urban brownfield sites do not just relate to wildlife. The vegetation of open land intercepts and absorbs more rainfall than the impermeable surfaces of concrete and tarmac. It therefore has a valuable function in flood prevention and reducing the amount of polluted run-off reaching our urban waterways.



the environmental benefits of green roofs are recognised in other parts of Europe

Cities are generally warmer than surrounding areas. Increasing vegetation cover will reduce the localised urban heat island effect by reducing air temperature and improving air circulation. Trees and shrubs that have naturally colonised brownfields can also reduce air pollution and noise.

These undervalued functions of brownfield sites, along with their social value as natural wildspace, need to be considered as part of more vigorous approach to sustainable development of brownfields.

relieving the pressure

This report has outlined the importance of urban brownfield sites of high wildlife value. It has also emphasised the potential of brownfield sites as community accessible natural areas, particularly where there is a deficiency of conventional parks and green spaces.

London Wildlife Trust believes brownfields can be much more than just sites for economic development, despite the many policies and associated actions that promote this view. The Trust suggests that it would be feasible to adopt a truly sustainable approach to the development of brownfields – an approach that offers social and environmental, as well as economic benefits. It proposes an urgent programme of action.

3 steps towards sustainable development of brownfields

RECOGNISE the biodiversity of our remaining urban brownfields and acknowledge the ongoing loss of their wildlife habitat.

PROTECT London's remaining brownfield sites of the highest ecological value and manage them to retain their biodiversity.

PROMOTE alternative approaches to regeneration and brownfield development, where urban design respects existing wildlife value, the spirit of place and community well-being.

London Wildlife Trust also calls for improved dialogue between the Greater London Authority, London Development Agency, English Partnerships, Thames Gateway London Partnership, local planning authorities and environmental organisations. Working as a partnership, these organisations have the skills, resources and vision to help save London's valuable wildlife wasteland sites.

targets

As a first step, London Wildlife Trust recommends five targets for the partnership:

- Wasteland audit that maps the existing distribution of brownfields in London and identifies key sites that support species of London, regional and national nature conservation importance.
- Hierarchy of three levels of brownfield sites: those for which redevelopment should not proceed; sites which should be retained with appropriate mitigation; sites of low wildlife value where redevelopment should proceed as a priority.
- Ecological urban design guidelines that acknowledge the importance of brownfield biodiversity and encourage high-quality design standards embracing urban ecology and local landscape character.
- Brownfield nature reserves and open spaces that are managed to demonstrate their value to people and wildlife, from which good practice can be disseminated
- Research programme that develops our current understanding of wasteland ecology.



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a London habitat garden at the Thames Barrier Information Centre

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Editing and additional text by Jenny Scholfield and Miranda Waugh of London Wildlife Trust, and Ruth Hayhurst of Ruth Hayhurst Communications.

Illustration by Miranda Waugh. Photos by London Wildlife Trust, D. Gedge, Environment Agency, M. Game/LEU, M.Frith, S. Alcorn.

Designed by Roger Taylor. Printing by Ikon Printing Company.

With thanks to David Bevan, Ruth Day, James Farrell, Dusty Gedge, Jill Goddard, Helen Hall, Dan Hackett, Sarah Jennings, Peter Massini, Graham Myers, Emma Robertshaw.

Published on behalf of London Brownfields Forum by:

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