

# Wasteland

***“...that day there was barely a soul about in the official parks. But as soon as we hit waste wetland again, up near Lea Bridge, they reappeared, whole families out blackberrying, picnicking, taking short cuts. The land here was as bizarre and artificial an ecosystem as you could find. There was a coot’s nest on a floating car seat...close by you could stand and look down across a wonderful jungle of plants from three continents...It was like a wildlife version of the Notting Hill Carnival, rowdy, colourful and cosmopolitan, but with a touch of old village England, too.”*** (Mabey, 1998)

## 1. Aims

- To highlight and promote the value of London’s wastelands for people and wildlife
- To promote the appropriate retention, incorporation, and management of wasteland habitats within new developments in London
- To maintain a diverse network of wasteland sites

## 2. Introduction

Wasteland comprises the range of habitats that develop on land whose industrial, commercial, or residential use has declined or ceased. All of London’s wasteland falls within the term 'brownfield' (or 'previously-developed land'). Although wasteland can include pockets of scrub, woodland, and wetland, it is most often characterised by early successional habitats of herbaceous vegetation communities. Often, a high component of wasteland sites is bare ground and the debris from built structures, and wastelands are consequently diverse, with a dynamic ecological community characterised by animals and plants that are highly mobile.

Wasteland sites may once have been the location of railway sidings, factories, housing, sewage treatment works, docks or quarries. The biodiversity these areas support can be stunning and unique, providing a mosaic of species and communities at different stages of succession that enriches our urban environment. Wasteland provides ideal foraging habitat for birds like goldfinches, linnets and, on a few sites, black redstarts. The open character of these areas, with their small-scale variations in topography and climate, make many sites excellent for invertebrates and reptiles. The number of species present on some of London's wastelands is comparable to that seen on heathland and coastal dunes, both of which are UK priority habitats. Some of London's wastelands can support as many Red Data Book and Nationally Scarce invertebrate species as high quality ancient woodland.

Wastelands can provide important open spaces for local people in London and are often seen as being the only truly 'wild' city spaces remaining for the public to enjoy. There is great potential to make wasteland sites more accessible, safe and enjoyable through positive management. In many built-up areas, particularly in inner London, wastelands may be the sole natural greenspace available. If properly managed, they could help significantly to reduce the number of areas deficient in accessible open space. Beyond their recreational value, wastelands often exhibit a fascinating mixture of both native and exotic species that together reflect London's past and present international trade and diverse cultural energies.

### 3. Current Status

The current distribution of wasteland sites in London that are of biodiversity interest is not adequately known, and is difficult to assess due to the rapid rate of development underway. Wasteland sites designated as Sites of Importance for Nature Conservation (SINCs) continue to be destroyed, and, though concentrations of wasteland can still be found in the Thames Gateway, and the Lee and Wandle valleys, the wildlife value of small wasteland sites is often unrecognised in the London boroughs. It is clear that the total area of wasteland habitat across London is continuing to decline due to on-going development pressure in the capital: this is a trend that is likely to continue.

Wasteland sites that have succeeded to woodland can be recognised as being sufficiently 'naturalised' within PPG3 (Planning Policy Guidance Note 3, Housing), to be deleted as priority development sites, and may then become candidates for protection, especially if they afford demonstrable open space benefits. However, wastelands of earlier successional stages, which often exhibit the most diverse communities, remain vulnerable to development pressure.

### 4. Specific Factors Affecting the Habitat

#### 4.1 Rate of creation and loss of wasteland

Many of the factors that once contributed to the existence of large wasteland sites in the capital, such as the relocation of major industry, have now reduced or ceased. In addition, current policy set out in the Government's Urban White Paper (2000), Sustainable Communities Plan (2003), and Planning Policy Guidance (PPG3, Housing) targets wasteland sites for development. Government policy encourages rapid recycling of all available (known as "vacant") land with little regard for current wildlife value. A projected decline in the number of wasteland sites is therefore expected. The percentage of new homes built on brownfield land remains a Government headline indicator of sustainable development, and pressure is being brought to bear to raise this figure further in London and the South-east. This leads to a constant recycling of wasteland, and has reduced the number of sites of at least five to ten years old of age that are the most likely to exhibit the conditions required for scarce invertebrate species to colonise.

## 4.2 Substrate contamination

The substrate of wastelands can be highly variable and may include demolition rubble, railway ballast, pulverised fuel ash, and the foundations of polluting industries, as well as natural substrates. Wasteland substrates are characteristically nutrient-poor and free-draining and, as a result, the vegetation of early-colonised wasteland is typically sparse, containing species adapted to the physical and chemical conditions. However, the contamination of many wastelands can be a significant public health issue, and needs to be addressed whatever their future role.

## 4.3 Early successional habitats

The plant communities found on wastelands are typical of those associated with newly colonised ground, and are commonly short-lived plants which require open conditions and are tolerant of the relatively harsh environmental conditions. A lack of available nutrients in the substrates found on wasteland sites, together with occasional human disturbance, limits the speed and effectiveness of subsequent colonisation by other, less pioneering, species. This leads to a mosaic on any one site of bare ground, early pioneer species and some scrub in patches where substrate nutrients may be more available or disturbance less. It is this mosaic that is so crucial to the many invertebrates associated with this habitat. It is essential that this mosaic character be retained on some sites to prevent the loss of species through natural succession. The maintenance of the bare ground that can support early successional communities through limited site management may be employed, as it is in many open habitats such as heathland and grassland.

## 4.4 Public perception

The impression of industrial decline and abandonment associated with wastelands has created a strong negative public image. Wasteland is often fenced off, inaccessible and has the appearance of having been forgotten, which can encourage activities such as fly-tipping. This poor image also exists within the nature conservation sector and, consequently, ecological research and the evaluation of wasteland sites have lagged behind that of other habitats. As a result, wasteland sites of high biodiversity value that have been set aside for public access are often managed inappropriately with the introduction of amenity grassland and tree planting in the belief the environment is being improved.

It is therefore a major challenge to raise awareness of the value of wasteland among decision-makers, land managers and the general public and to promote their management both for biodiversity and for safe, enjoyable access. There is low awareness that in areas deficient in conventional parks and green spaces, wasteland sites have the potential to provide new, accessible open spaces that offer a different experience for people than traditional parks.

# 5. Current Action

## 5.1 Legal status

Nationally there are several sites which include wasteland habitat that enjoy statutory site protection, but there are none within London. A number of London SINCS contain elements of wasteland habitat.

Several protected species are commonly associated with wasteland sites:

- Common lizard and slow-worm enjoy partial protection (protection against killing, injury and sale).
- Black redstart and its breeding sites, which are almost wholly confined to wasteland sites in London, are fully protected under Schedule 1 of the Wildlife and Countryside Act (1981, as amended), as is the little ringed plover and its breeding sites, a species which occasionally breeds on wasteland.
- Buttoned snout moth is a species listed under the National UK Biodiversity Action Plan, and is associated with the hop that grows on many wasteland sites.

## 6. Flagship Species

*These special plants and animals are characteristic of wasteland in London.*

<b>Black redstart</b>	<i>Phoenicurus ochruros</i>	A red-tailed, robin-sized bird of the thrush family. One of Britain's rarest birds. Once known as the 'power-station' or 'bombsite' bird, it is associated with wasteland and industrial sites.
<b>Linnet</b>	<i>Carduelis cannabina</i>	Wasteland with areas of scrub and grassland provide essential feeding and breeding grounds for these birds throughout the year. Summer males sport striking splashes of carmine red.
<b>Common lizard</b>	<i>Lacerta vivipara</i>	These cold-blooded reptiles like quiet sites with open ground that retain the heat, conditions often to be found on wasteland sites.
<b>The 'humble bumble'</b>	<i>Bombus humilis</i>	The Brown-banded Carder bee is another name for this nationally scarce bee. One of the national strongholds for this species is the flower-rich wasteland habitat found in the Thames Gateway area of London.
<b>False London rocket</b>	<i>Sisymbrium loeselii</i>	An introduction to London, found widely scattered across London wasteland sites.
<b>Rosebay willowherb</b>	<i>Chamerion angustifolium</i>	'Fireweed' is a classic plant of disturbed ground. It is historically associated in London with the bombsites of the Second World War and springs up in areas where there have been fires.
<b>Teasel</b>	<i>Dipsacus fullonum</i>	Teasel is often found in the rough grassland of some wasteland sites. It is named after the use of its spiny heads to tease wool before spinning. Goldfinches are often seen in the winter feeding on the seedheads.
<b>Viper's bugloss</b>	<i>Echium vulgare</i>	A member of the borage family, this plant has vivid blue and purple flowers. Linnaeus, who invented our system of biological classification, said it 'surpassed in splendour anything that can be imagined'.
<b>Buttoned snout</b>	<i>Hypena rostralis</i>	This rare moth has a stronghold in London and is associated with wasteland habitats. Larvae feed on hop and adults hibernate in man-made shelters, outbuildings etc.
<b>Common Blue</b>	<i>Polyommatus icarus</i>	An attractive, widespread species that needs sunny, sheltered, grassy vegetation. Larval foodplants include common birds-foot-trefoil and black medick.
<b>Small Copper</b>	<i>Lycaena phlaeas</i>	This butterfly survives in a range of wasteland habitats and needs warm, dry situations. Larval foodplants are common sorrel and sheep's sorrel.

<b>Wormwood</b>	<i>Cucullia absinthii</i>	A nationally scarce B species, one of the Shark moths. Bare, hard surfaces provide the best conditions for the larval foodplant, e.g. broken tarmac, quarries or railway ballast.
-----------------	---------------------------	---

## 7. Objectives, Actions and Targets

*Most of these actions are specific to this habitat. However, there are other, broader actions that apply generically to a number of habitats and species. These are located in a separate 'Generic Action' section which should be read in conjunction with this document. There are generic actions for Site Management, Habitat Protection, Species Protection, Ecological Monitoring, Biological Records, Communications and Funding.*

*Please note that the partners identified in the tables are those that have been involved in the process of forming the plan. It is not an exclusive list and new partners are both welcomed and needed. The leads identified are responsible for co-ordinating the actions – but are not necessarily implementers.*

### **Objective 1 To share and disseminate information about London's wastelands**

**Target: To have distributed existing published material to developers and planners by 2007**

<b>Action</b>	<b>Target Date</b>	<b>Lead</b>	<b>Other Partners</b>
1.1 Develop a proposal for a research project to develop methodology for the evaluation of wasteland sites	Achieved 2001	Working Group	
1.2 Collate existing data and map wastelands sites in areas of significant development and growth	2005	Working Group	GLA, LAs (reflective of the areas of growth), other interest groups, ELBS, LWT
1.3 Collate existing data on mitigation and planning conditions for loss of biodiversity on wasteland sites as a result of development	2005	LWT	Working Group
1.4 Disseminate information on mitigation and planning conditions to Planners	2006	Working Group	
1.5 Devise and disseminate survey methodology for wasteland invertebrates	2004	Working Group	

1.6 Target the construction industry by liaising with the Black Redstarts Working Group, Built Environment Working Group and green roof experts to produce landscape and site management guidance that incorporates the biodiversity value of wasteland sites	2005	Working Group	Black Redstart Working Group, Built Environment Working Group, Green Roof experts
1.7 Disseminate landscaping and site management guidance to relevant London construction industry contacts highlighting the distinctive wildlife value of wasteland sites	2006	Working Group	Black Redstart Working Group, Built Environment Working Group, Green Roof experts
1.8 Disseminate UCL practitioners brownfield report to relevant stakeholders and produce a link to the report on the London Biodiversity Partnership website	2004	Working Group	UCL
1.9 Collate existing data on wasteland site ecology and biodiversity	2006	LWT	GLA, LA, Working Group

**Objective 2 To raise awareness of the social and wildlife values of wasteland and increase access**

**Target: Hold a wasteland awareness day 2005, a wasteland conference Annually, and enable five publicly accessible wasteland sites by 2007**

Action	Target Date	Lead	Other Partners
2.1 Hold a wasteland awareness day in conjunction with Built environment/ Green Roof Conference, planned for 2005	2005	Working Group	Built Environment Working Group, Black Redstarts Working Group
2.2 Provide guidelines to landowners and land managers on wildlife and community value of temporary sites	2005	Working Group	LA, LWT, LRT
2.3 Hold Annual Conference highlighting the value of wastelands in London	Annually	Creekside	Working Group
2.4 Organise a half day seminar with landscaping and management with the London boroughs	2005	LCD	GLA
2.5 Identify key sites with the potential for wasteland habitat creation or retention within new development proposals and provide recommendations for landscaping and management	Ongoing	Working Group	LA
2.6 Encourage five publicly-accessible wasteland sites in London	2007	Working Group	LA, GLA

2.7 Promote the value of strategically retained wasteland habitats through a photocall and press release	2007	Working Group	Communications Working Group
--	------	---------------	------------------------------

#### Relevant Action Plans

##### London Plans

Woodland; Tidal Thames; Canals; Black redstart; Railway Linesides Audit; London's Exotic Flora Statement; The Humble bumble (a long-tongued bumblebee) Statement.

##### National Plans

Urban habitats; A long-tongued bumblebee (*Bombus humilis*).

#### Key References

DETR (2000) *Our towns and cities: the future*. The Stationery Office Limited.

Frith, M., (2001), *Brown before green – biodiversity and the Urban White Paper*, *ECOS 22* (1): 6-11 (BANC).

Gedge, D., (2001), *Roofspace – a place for brownfield biodiversity*, *ECOS 22* (3-4): 69-74 (BANC).

Grant, G., Engleback, L, and Nicholson, B., (2003) *Green roofs: their existing status and potential for conserving biodiversity in urban areas*. English Nature Research Report 498. English Nature.

Harrison, C. and G. Davies 2002, 'Conserving biodiversity that matters: practitioners' perspectives on brownfield development and urban nature conservation in London', *Journal of Environmental Management* **65**, 95-108.

Mabey, R. (1998 edition), *The Unofficial Countryside*, (William Collins and Sons Ltd).

London Ecology Unit (1986). *Nature Conservation Strategy for London: 4: Wasteland, Woodland, The Tidal Thames, Barnet and Lewisham* (London Ecology Unit).

London Wildlife Trust (2002) *Brownfield? Greenfield? The threat to London's unofficial countryside*

Weightman, G., and Birkhead (1986). *City Safari: Wildlife in London* (Sidgwick and Jackson Ltd. in association with London Weekend Television).

British Wildlife: Harvey, P 2000, The East Thames Corridor: a nationally important invertebrate fauna under threat, *British Wildlife* **12** (2): 91-98 (British Wildlife Publishing).

#### Abbreviations

EN - English Nature

GLA - Greater London Authority

LA - Local Authority

LRT - Lea Rivers Trust

LWT - London Wildlife Trust

UCL - University College London

UDC - Urban Development Corporation

#### Contact

*The Lead for this habitat is London Wildlife Trust.*

**Jenny Scholfield**  
**London Wildlife Trust**  
**Skyline House**  
**200 Union Street**  
**London SE1 0LW**

**Tel 020 7261 0447**  
**Email [jscholfield@wildlondon.org.uk](mailto:jscholfield@wildlondon.org.uk)**  
**Web [www.wildlondon.org.uk](http://www.wildlondon.org.uk)**