Habitat Action Plan

Private Gardens

March 08

"A poor widow in her weeds
Sowed her garden with wild flower seeds…
And now all summer she sits and sews

Where willow herb, comfrey, bugloss blows,
Teasel and tansy, meadowsweet,
Campion, toadflax, and rough hawksbit…"
(Walter de la Mare)

1. Aims

- To highlight and protect the overall resource for wildlife provided by private gardens in London.
- To improve individual private gardens as habitat for a range of local wildlife.

2. Introduction

For the purposes of this action plan, private gardens are defined as the private open space surrounding residential dwellings where the householders have sole responsibility for management.

Private gardens form an important part of London's landscape. For many people these are the places where they have most frequent contact with nature.

They are probably the most varied areas of green space in the Capital, ranging in size from tiny 'pocket handkerchiefs' in the central London boroughs, to the elaborate landscaped parkland of London's mansions. Garden ponds support amphibians, dragonflies and other wildlife. Dense undergrowth provides good breeding sites for small birds and mammals, many of which have suffered significant declines in the countryside. Hedgehogs, bats, butterflies, stag beetles and

other invertebrates are frequently associated with this habitat. Larger gardens and gardens adjoining areas of semi-natural habitat, may help support grass snakes, badgers, foxes and many birds, including woodpeckers.

3. Current Status

The rapid growth of suburban London last century resulted in large areas of low-density housing enclosing groups of individual gardens. Together these add up to substantial areas of open land. As undeveloped land has become scarcer in the city, gardens have come under pressure for development.

An analysis of aerial photographs undertaken in 1991 found that private gardens comprised approximately 20% of Greater London, equivalent to 30,000 hectares. The mosaic of gardens across the capital acts as an 'urban nature reserve', widely recognised as providing valuable habitat for a significant number of species.

4. Specific Factors Affecting the Habitat

4.1 Design and management

Garden design and approach to management has a profound effect on the wildlife associated with gardens. A garden that consists largely of lawn and hard surfacing, or is constantly replenished in a bedding scheme style, will support far fewer species. Unfortunately the formally managed garden is still a popular concept and the entrenched attitudes of many gardeners are difficult, yet not impossible, to influence.

Research and experience have both shown that gardens managed to provide a range of habitat features will attract and sustain more wild plants and animals. Examples include dense shrubberies, climbers, areas of long grass and wildflowers, bird feeders, dead wood and garden ponds.

4.2 Planting

The plants used in a garden can have a large impact on the wildlife supported by it, but perhaps not to the extent anticipated by gardeners who are unwilling to change their basic approach to the overall appearance of their garden. A garden must provide both food and shelter in order for wildlife to thrive, and planting suitable plants in the right places can help to provide these. Management regimes are also important – for example, cutting ivy back rigorously every year will prevent flowering.

Some plants are renowned for improving a garden's attractiveness for wildlife. For example, ivy is a seasonally important source of nectar and berries, provides nesting and roosting habitats for birds, and is the caterpillar food plant of the holly blue butterfly. *Pyracantha*, hawthorn and female holly trees provide autumn berries and nesting sites for thrushes and blackbirds if allowed to grow to a sufficient height.

Some plants have comparatively little value for wildlife, for example double-flowered varieties which produce no nectar or pollen. Gardeners trying to encourage wildlife in their garden should select plants which produce food or create shelter for wildlife (or both).

Using pesticides in the garden can be very harmful to wildlife, so plants which are less susceptible to pests and diseases should be used wherever possible. For example, plants with the RHS 'Award of Garden Merit' are reliable good quality species and cultivars that are often more tolerant of pests and diseases.

A further concern is the damage caused by some garden plants when they are dumped or escape into natural areas. Examples include rampant colonisers such as parrot's feather, which causes severe problems by choking waterways and ponds, and the Spanish bluebell which can hybridise with our native bluebell.

4.3 Pesticide use

Excessive use of pesticides has been cited as one of the potential causes of the decline of certain wild species, especially birds and hedgehogs. Concern for the use of pesticides is based around three issues:

- They directly reduce food availability such as insects and snails, which are eaten by song thrushes and many other animals.
- They are often indiscriminate in their effects, killing beneficial insects such as ladybirds along with the target 'infestation'.
- Pesticides can sometimes enter the foodchain – often with disastrous results. For example, ants treated with ant-killer have been known to poison nestling green woodpeckers.

Organic gardening is becoming more popular. However, ignorance and the desire for 'quick fix' solutions still pervade the choice of pest control methods. There is clearly a need for greater awareness in this area.

4.4 Scale

The size of a garden and the extent to which it is connected with adjacent open land is a major factor influencing the wildlife that will use it. However, all gardens are valuable – even a small window box planted with herbs can provide nectar for foraging insects. Gardens are important 'stepping stones' for wild animals, allowing them to move more easily between nature reserves and other good wildlife sites.

4.5 Planning controls

New targets for housing, reflecting social, economic and demographic changes, have fuelled the demand for suburban infill or backland development. This has resulted in significant loss of garden habitat. However, a number of boroughs have planning policies in place to discourage this.

Since the second half of the twentieth century, people have aimed for the ideal of a house with its own garden. However, increasing development pressure in recent years (coupled with decreasing availability of land) has resulted in a reduction in the average size of gardens provided in new developments.

4.6 Wider factors

Gardeners are significant consumers of resources. The horticultural industry often sources unsustainable products such as plants dug up from the wild, peat, tropical hardwoods and natural stone, collected from threatened habitats around the world. The transport of goods and the use of resources in the manufacture of garden products are issues for gardeners to be aware of in reducing their ecological footprint. Garden centres and growers clearly have a significant role to play in marketing appropriate plants and products.

People sometimes presume that the best way to get wildlife into a garden is to take it from the wild. Plants and animals are still being removed from the countryside, and sometimes even from nature reserves. Gardeners must be encouraged to source sustainable materials wherever possible, and to use plants that come from legitimate sources (not taken from the wild).

4.7 Climate Change

Current predictions are that the climate in London and southeast Britain will change towards hotter drier summers, with warmer wetter winters and more frequent extreme weather events such as storms and flash flooding. Gardens are invaluable in helping to mitigate against the effects of climate change, for example by allowing slower drainage of rainwater, thereby reducing the risk of flooding. Unfortunately front gardens are at more and more risk from being paved over for parking, exacerbating flooding problems. Garden plants are also effective in filtering out pollutants and reducing the heat island effect.

One of the more positive effects of climate change is that gardeners are able to grow a greater range of plants, some not previously considered to be hardy in this country.

Also affected by climate change are some insect pests. The glasshouse thrips (*Heliothrips haemorrhoidalis*) used to be confined to glasshouses but is now infesting some evergreen shrubs in London gardens. Another glasshouse pest, fluted scale (*Icerya purchasi*) is also now infesting garden plants. Some southern European pests that have recently become established in London and elsewhere in England are rosemary beetle (*Chrysolina americana*), berberis sawfly (*Arge berberidis*) and southern green shield bug (*Nezara viridula*).

5. Current Action

5.1 Legal status

Private gardens are seldom protected from development purely for their wildlife value, and very few are included in Sites of Importance for Nature Conservation. However, biodiversity is often a factor included in planning policies to protect garden land.

Conservation Area status and Tree Preservation Orders give some protection to tree cover.

Some animals using gardens are protected to various degrees by wildlife legislation, notably bats, badger, slow-worm, great crested newt, common lizard and grass snake.

5.2 Mechanisms Targeting the Habitat

These current actions are ongoing. They need to be supported and continued in addition to the new action listed under Section 7.

5.2.1 Promotion of wildlife gardening

Wildlife gardening is gaining in popularity, acceptance and understanding, particularly as a result of promotion by the media. There has been a move towards more sustainable practices and products. The broad popular appeal of wildlife gardening has led to various articles, books and programmes including the BBC's popular 'Charlie's Wildlife Gardens' series.

A number of demonstration gardens have been established in London to inspire and inform the public. Examples of public wildlife gardens can be found at the Natural History Museum, London Wildlife Trust's Centre for Wildlife Gardening, London Zoo, the London Wetland Centre, Regents Park, Queen’s Park in Westminster and in various city farms and community gardens. Kew Gardens also has several areas managed to attract wildlife. Wildlife gardens at flower

shows in London are popular with the public and have won recognition from judges, and recent promotion of wildlife gardening by the Royal Horticultural Society and the Britain in Bloom competition has offered further credibility.

Printed information to assist potential wildlife gardeners has been produced by various organisations, including Gardening Which?, the Royal Horticultural Society, and Froglife. Several London boroughs have produced wildlife gardening information for local residents, such as Redbridge, Bromley and Croydon. London Wildlife Trust has produced a comprehensive pack on wildlife gardening for Londoners, with support from the London Biodiversity Partnership.

Training programmes, talks and practical events have been provided by groups including BTCV, London Wildlife Trust, the Natural History Museum, the Horniman Museum and the Worker's Education Association. As many mainstream horticultural courses include units on ecology and organic gardening, growing numbers of groundspeople and landscapers are gaining an understanding of wildlife gardening. To assist gardeners in choosing appropriate native plants for their region, Flora for Fauna has produced a local plants database, searchable by postcode (see www.nhm.ac.uk/science/projects/fff/index.htm).

Competitions, family events, free-tree schemes and many other projects have raised the profile of gardens as places for wildlife. Extremely successful one-day conferences for gardeners interested in wildlife are regularly organised by the steering group for this Action Plan.

5.2.2 Survey and monitoring

A number of public surveys have invited gardeners to send in their records of easily recognised species. Six thousand records of stag beetle sightings were recorded in surveys carried out by the London Wildlife Trust, London Borough of Bromley and the People's Trust for Endangered Species between the years 1999 and 2000. The London Wildlife Trust's 'Wildlife in Gardens' survey attracted 4400 responses and was further developed by various local authorities and borough biodiversity partnerships. Detailed surveys of garden ponds have been carried out in Merton, Ealing, Croydon and Southwark.

The London Ecology Unit and London Borough of Sutton undertook a detailed study of birds in suburban gardens, demonstrating clearly that the diversity of bird species increases with garden size.

An ongoing survey of biodiversity is being undertaken in the Wildlife Garden at the Natural History Museum. Findings to date clearly demonstrate the value of even the most urbanised wildlife gardens for a wide range of invertebrates and birds. A detailed survey of the plants and animals of Buckingham Palace Gardens was carried out by the London Natural History Society between 1995 and 1998, to follow earlier work undertaken in the early 1960s. This has resulted in a comprehensive list of the biodiversity that survives in central London.

On a national scale, the Garden Birdwatch survey is collated annually by the British Trust for Ornithology (BTO) and currently has around 400 surveyors in London; an ongoing National Butterfly Survey is carried out by Butterfly Conservation; and the Garden Mammal Survey is carried out by the Mammal Society.

5.2.3 Policy

The targets and actions in this action plan directly part-implement and more broadly align with several of the policies and proposals within *Connecting with Nature,* the Mayor's Biodiversity Strategy (GLA 2002). These include:

PROPOSAL 7 The Mayor expects that biodiversity and wildlife habitat will be taken into account in proposals for the re-development of garden land, and will develop guidelines for the evaluation of such proposals.

PROPOSAL 29 The Mayor will promote the important role of private gardens for wildlife and together with other members of the London Biodiversity Partnership, will provide information to encourage London's gardeners to make their gardens wildlife –friendly.

PROPOSAL 62 The Mayor will consider, with the London Development Agency, the development of a strategy for ethical trade, to discourage trading activity that damages biodiversity beyond London's borders, including such issues as the use of peat, limestone and wood products from unsustainable sources

POLICY 8 London's many species, and the landscapes where they are found, should be celebrated and promoted.

6. Flagship Species

These special animals are characteristic of private gardens in London

		Why selected?	*U.K BAP status*
Hedgehog	*Erinaceus europaeus*	Hedgehogs are held in great public affection and are often found in gardens where they carry out the valuable task of eating slugs and insects. However, they are now sadly absent from central London. Traffic, dry summers, steep-sided ponds and slug pellet poisoning threaten hedgehogs, as well as fashions in "tidy" minimalist garden design denying them traditional foraging grounds.	UK BAP priority species. Although hedgehogs are still widely distributed across the UK, their numbers are now experiencing a significant decline.
Common frog	*Rana temporaria*	Frogs can be found across London, and provide fascination to many gardeners. Their main requirements are sunny ponds for breeding, damp cover for hunting and undisturbed places for hibernation.	Not a priority UK BAP species, but ponds are a national priority habitat. In London, ponds are threatened due to building on gardens and fashion for paving over and decking.
Dragonflies and damselflies	Odonata Common species include Blue-tailed damselfly *Ischnura elegans* and Southern hawker dragonfly, Aeshna cyanea	The whirring wings of dragonflies and damselflies bring delight to all. They need medium to large sunny open ponds, without fish, which shelve gently and have appropriate marginal planting of native water plants	Two species of dragonfly and damselfly are UK BAP priorities, but neither of these are found in London. However, all dragonfly and damselfly species can be good indicators of BAP priority habitats such as ponds and rivers and streams.

Wren	*Troglodytes troglodytes*	Found in shrubby corners of even the most central London areas. Wrens prefer to hide from view but give themselves away with their explosive trilling song.	Not a UK BAP priority species.
Blackbird	*Turdus merula*	A survey of Londoners found this was their most popular garden bird, perhaps because it is present throughout London wherever there are low dense shrubs and lawns.	Not a UK BAP priority species.
House sparrow	*Passer domesticus*	Once common across gardens throughout London, sparrows have declined in number by 70%. How people manage their gardens is important to the fortunes of the house sparrow within London	UK BAP priority species.
Ladybirds (various species)	Coccinellida common species include the 2-spot (*Adalia 2-punctata*), 7-spot (*Coccinella 7-punctata*) and the recently established harlequin ladybird (*Harmonia axyridis*).	Loved by children and gardeners. At least 10 species are common to gardens. Most ladybirds feed on aphids and other small insects but some species feed as larvae on mildew fungi. Obvious threats include excessive pesticide use and destruction of hibernation sites.	Not UK priority BAP species.
Bumblebees (various species)	Common species include *Bombus terrestris*, *B. lucorum, B. pascuorum* and *B. pratorum.*	Six species commonly visit garden flowers to collect nectar and pollen (which is used as food for the adult bees and their larvae). Bees are essential for the pollination of many wild and cultivated plants.	Five species of bumble-bee are UK priority BAP species. Of these, two species are found in London – *Bombus humilis* (the brown-banded carder bee) and *Bombus sylvarum* (the shrill carder bee)
Holly blue butterfly	*Celastrina argiolus*	Notable particularly for having two generations a year with different caterpillar food plants, the flower buds and young leaves of holly and the flower buds of ivy. The Holly blue is commonly seen in gardens and is easily identified	Not a UK priority BAP species. Widespread throughout Britain

Garden tiger moth	*Arctia caja*	One of the most dramatic, beautiful, and easily recognisable species of British moths. Often found in gardens – hence its name. However, the garden tiger has suffered a massive decline in the UK in recent years, so allowing stinging nettles (its foodplant) to grow in little used areas of the garden can help the Garden tiger	UK BAP priority species. The garden tiger was once very abundant in the UK but has declined by over 40% during recent years, particularly in southern England..
Hummingbird hawk moth	*Macroglossum stellatarum*	A beautiful day-flying moth can be seen in gardens feeding on nectar from flowers. A migrant species, it is becoming more common in London gardens as a consequence of climate change. It is a good 'indicator' of climate change.	Not a UK BAP priority species,

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.

Target 1 To protect the overall resource of private gardens in London by discouraging building on existing gardens by 2015

Action	Target Date	Lead	Other Partners
1.1 Establish and publicise policy and criteria for protection of garden sites from built development	2006 achieved	GLA	LA
1.2 Asses the amount of private gardens in London by digital mapping	2007 and annually	GIGL	Working group
1.3 Produce a report on the amount of private garden land in London	2008	LWT	Working group
1.4 Draw up an action plan, following the report, to discourage building on gardens	2008	Working group	

Target 2 Support and encourage recording of biodiversity in gardens, compiling baseline information on wildlife in London's gardens by 2009

Action	Target Date	Lead	Other Partners
2.1 Repeat London Wildlife Trust's 'Wildlife in Gardens' survey	2004 achieved	LWT/GIGL	LA
2.2 Carry out attitudinal surveys of garden centre users	2003 achieved	LWT	GW
2.3 Continue survey of home pesticide use and report on findings	2003 achieved	PAN	Working group
2.4 Increase the numbers of participants in the Garden Birdwatch survey to 1000.	2003 achieved	BTO	Working group
2.5 Compile and analyse survey information from surveys on species in gardens	2008	Working group	GLA GIGL
2.6 Publish a list of sources for identifying garden invertebrates	2008	Working group	GW, NHM, RHS, LWT
2.7 Produce report on survey of garden centre users and species in gardens	2005 achieved	BOST/ LWT	Working group
2.8 Carry out species survey in gardens, hosted by GIGL	2008	GIGL	Working group
2.9 Recruit 100 people to carry out 'Moths Count' survey	2009	Working group	Butterfly Conservation
2.10 Cross reference UK BAP species in London Gardens in each borough	2009	GIGL	Working group

Target 3 Raise public awareness of wildlife gardening by increasing interest in events and resources offered by partner organisations by 2015

Action	Target Date	Lead	Other Partners
3.1 Establish a Wildlife Gardens Working Group	2002 achieved	LWT	LA, LWT, Froglife, PAN, RBGK, NHM, GW, CPG, RHS, FCF&CG, GLA, Others
3.2 Promote demonstration wildlife gardens which are open to the public in London	2002 achieved	LWT	FCFCG, Working group
3.3 Produce a wildlife gardening guide for London's wildlife gardeners	2002 achieved	LWT/GLA	Working group
3.4 Target garden centres with publicity on wildlife gardening conference 2008 to encourage staff to attend	2008	Working group	LWT
3.5 Promote information on wildlife gardening talks and training throughout London.	2005 achieved	LWT	LBP
3.6 Develop a plan and hold a wildlife gardeners gathering and conference	2003 achieved	Working Group	LWT, NHM
3.7 Organise workshops to raise profile of wildlife gardening criteria and categories in Borough in Bloom competitions	2006 achieved	GLA/LWT	LBP, LAs, Working group
3.8 Run wildlife gardening campaign	2005 achieved	LWT	Working group
3.9 Hold a second Wildlife Gardening Conference	2005 achieved	LWT/NHM	Working group
3.10 Produce publicity on garden wildlife for commuters	2010	GLA/LWT	Working group
3.11 Hold a national wildlife gardening conference in 2008 in partnership with the National Forum for Gardening with Wildlife in Mind	2008	ZSL/LWT/ GLA/NHM	Working group and members of the National Forum for gardening with wildlife in mind.
3.12 Launch Garden Species survey	2008	Working group	LWT

Relevant Action Plans

London Plans

Chalk Grassland, Reptiles; Churchyards and Cemeteries; Parks, Squares & Amenity Grassland; Bats; House Sparrow; Grey Heron; Stag Beetle; Mistletoe, Standing Water

House Martin, Swift, Humble Bumble and Exotic Flora statements.

National Plans

Habitats

Ponds and Open Mosaic Habitats on Previously Developed Land are national priority habitats, but do not yet have action plans. Hedgerows are also a national priority habitat.

Species

Brown-banded carder bee

Shrill carder bee

Stag beetle

Hedgehog, garden tiger moth and house sparrow are UK BAP priority species but do not yet have action plans,

Key References

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Abbreviations of contributing organisations

BTO - British Trust for Ornithology
BOST – Bankside Open Spaces Trust
CPG - Chelsea Physic Garden
FCF&CG - Federation of City Farms and Community Gardens
GIGL – Greenspace Information for Greater London
GLA - Greater London Authority
GW – Gardening Which?
LA - Local Authorities
LBP- London Biodiversity Partnership
LNHS- London Natural History Society
LWT - London Wildlife Trust
PAN - Pesticides Action Network
RBGK - Royal Botanic Gardens at Kew
RHS - Royal Horticultural Society
NHM - Natural History Museum
WWT – Wildfowl and Wetland Trust
ZSL- Zoological Society of London

Contact

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List of Partner Organisations

British Trust for Ornithology
Bankside Open Spaces Trust
Federation of City Farms and Community Gardens
Greenspace Information for Greater London
Greater London Authority
Gardening Which?
Islington Ecology Service
Local Authorities-
London Biodiversity Partnership
London Natural History Society
London Wildlife Trust
Pesticides Action Network
Royal Botanic Gardens at Kew
Royal Horticultural Society
Southwark Borough Council
Natural History Museum
Wildfowl and Wetland Trust
Westminster Borough Council
Zoological Society of London