

Harrow Biodiversity Action Plan





Logo of The Harrow Biodiversity Partnership

Maps contained herein are reproduced from the Ordnance Survey mapping with the permission of the Controller of Her Majesty's Stationery Office.

Crown Copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings.

London Borough of Harrow 100019206

For a large print version of this document, or a summary of this document in your language, please contact the Planning Department on 020 8736 6180

- Albanian** Nëqoftëse gjuha Angleze nuk është ghuha juaj e parë, dhe keni nevojë për përkthimin e informatave të përmbajtura në këtë dokumentë, ju lutemi kontaktoni numërin dhënë.
- Arabic** إذا كانت الانجليزية ليست لغتك الأولى وتحتاج لترجمة معلومات هذه الوثيقة، الرجاء الاتصال على رقم
- Bengali** যদি ইংরেজি আপনার মাতৃভাষা না হয় এবং আপনি যদি এই প্রচারপত্রের তথ্যগুলোর অনুবাদ পেতে চান তাহলে যে টেলিফোন নম্বর দেওয়া আছে সেখানে দয়া করে যোগাযোগ করুন।
- Chinese** 如果你主要說用的語言不是英語而需要將這份文件的內容翻譯成中文，請打註明的電話號碼提出這個要求。
- Farsi** اگر انگلیسی زبان اول شما نیست و شما نیاز به ترجمه اطلاعات موجود در این مدرک را دارید، لطفاً با شماره داده شده تماس بگیرید
- Gujarati** જો ઈંગ્લિશ તમારી પ્રથમ ભાષા ન હોય અને આ દસ્તાવેજમાં રહેલ માહિતીનો તરજૂમો (ટ્રાન્સલેશન) તમને જોઈતો હોય તો કૃપા કરી જણાવેલ નંબર ઉપર ફોન કરો
- Hindi** यदि आपको अंग्रेजी समझ नहीं आती और आपको इस दस्तावेज़ में दी गई जानकारी का अनुवाद हिन्दी में चाहिए तो कृपया दिए गए नंबर पर फोन करें।
- Panjabi** ਜੇ ਤੁਹਾਨੂੰ ਅੰਗਰੇਜ਼ੀ ਸਮਝ ਨਹੀਂ ਆਉਂਦੀ ਤੇ ਤੁਹਾਨੂੰ ਇਸ ਦਸਤਾਵੇਜ਼ ਵਿਚ ਦਿੱਤੀ ਗਈ ਜਾਣਕਾਰੀ ਦਾ ਤਰਜਮਾ ਪੰਜਾਬੀ ਵਿਚ ਚਾਹੀਦਾ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਦਿੱਤੇ ਗਏ ਨੰਬਰ ਤੇ ਫੋਨ ਕਰੋ।
- Somali** Haddii Ingiriisku uusan ahayn afkaaga koowaad aadna u baahan tahay turjumidda xog ku jirta dokumentigan fadlan la xiriir lambarka lagu siiyey.
- Tamil** ஆங்கிலம் உங்கள் தாய்மொழியாக இல்லாதிருந்து இப்பத்திரத்திலிருக்கும் தகவலின் மொழிபெயர்ப்பு உங்களுக்கு தேவைப்பட்டால் தயவுசெய்து தரப்பட்ட தொலைபேசி எண்ணில் தொடர்பு கொள்ளவும்.
- Urdu** اگر انگریزی آپ کی مادری زبان نہیں ہے اور آپ کو اس دستاویز میں دی گئی معلومات کا اردو ترجمہ درکار ہے، تو براہ کرم دیئے گئے نمبر پر رابطہ کریں۔

In 1994 the UK Government published a report entitled 'Biodiversity: The UK Action Plan'. This was a broad strategy for conserving and enhancing wild species and wildlife habitats in the UK for the next 20 years. It was decided that broadening public involvement in conserving biodiversity and conservation work at a local level was required in order to deliver the UK Action Plan. Local Biodiversity Action Plan (BAP) were felt to be the appropriate mechanism to deliver this national plan.

The Harrow BAP sets out a framework for the protection, conservation and enhancement of wildlife within Harrow. The Harrow BAP is a culmination of work by various members of the Harrow Biodiversity Partnership. The Harrow BAP has identified various habitats and species, which are of importance within the borough.

Habitats selected include

- Bare ground
- Decaying Timber
- Garden and Allotments
- Grassland
- Heathland
- Parks
- Standing and Running Water
- Wasteland
- Woodlands

Species selected include

- Bats
- Heath Spotted Orchid
- Reptiles and Amphibians
- Southern Wood Ants

Within town planning terms, the above habitats and species will be referred to as being 'priority' habitats and species. Within the Harrow Unitary Development Plan policy EP 27 Protected Species states that 'protected species' in Harrow include priority species in national, London and local BAPs.'

An action plan has been specifically prepared for each of these habitats and species. The action plans contain a series of measurable targets, based around five broad themes. These themes are

- Policy and Strategy
- Habitat Management and Creation
- Advisory
- Research and Monitoring
- Raising Awareness

Executive Summary	1
1. What is Biodiversity?	4
2. Why is it important to conserve Biodiversity?	4
3. What is a Biodiversity Action Plan?	5
4. The origins of developing Local Biodiversity Action Plans	5
5. Why does Harrow need a Biodiversity Action Plan?	6
6. The Harrow Biodiversity Partnership	6
7. Policy Context for the Harrow Biodiversity Action Plan	8
8. Aims and objectives of the Harrow Biodiversity Action Plan	10
9. What biodiversity exists within Harrow	11
10. Selecting important habitats and species	17
11. Monitoring the Harrow BAP	18
References	19
Generic Action Plan	20
Bare Ground Habitat Action Plan	25
Decaying Timber Habitat Action Plan	34
Garden and Allotment Habitat Action Plan	44
Grassland Habitat Action Plan	56
Heathland Habitat Action Plan	73
Park and Amenity Grassland Habitat Action Plan	81

Standing and Running Water Habitat Action Plan	91
Wasteland Habitat Action Plan	102
Woodland Habitat Action Plan	111
Bat Species Action Plan	124
Heath Spotted Orchid Species Action Plan	131
Reptiles and Amphibian Species Action Plan	138
Southern Wood Ant Species Action Plan	145

1. What is Biodiversity?

Biodiversity or to use its technical title Biological Diversity, encompasses all species of plants and animals living on earth.

The UK Biodiversity Group states that not only does biodiversity 'include all species of plants and animals, but also their genetic variation, and the complex ecosystems of which they are part. It is not restricted to rare or threatened species but includes the whole of the natural world from the commonplace to the critically endangered. It includes the plants and animals familiar to all of us in the places where we live or work, wherever that may be.'

2. Why is it important to conserve Biodiversity?

Biodiversity is important for a variety of reasons, but essentially it provides us with vital components for sustaining life. For example oxygen, water, food, clothing, health and relaxation are all derived from biodiversity. This makes a compelling case for why conserving biodiversity is important to everyone, regardless of where in the world you live.

A number of partners from across the world have come together, with the collective aim of halting biodiversity loss by 2010. Within the UK there are a number of partners including the UK Government, a number of local governments and non governmental groups.

In June 2007 a report entitled 'Biodiversity in Your Pocket', was published by Defra on behalf of the UK Biodiversity Partnership. Within the UK this is the first time that a set of biodiversity indicators have been produced. The report shows changes in aspects of biodiversity such as the population size of important species or the area of land managed for wildlife. The report will be used to assess whether the commitment made by the UK Government of working towards halting biodiversity loss by 2010 is being achieved.

At a local level, it is important to conserve biodiversity, as it is often the wildlife and habitats found within an area which makes it distinctive, and in some instances unique from other parts of the country. For example the Chilterns are known for their chalk downland and North Yorkshire is often associated with heathland.

3. What is a Biodiversity Action Plan?

A BAP is essentially a mechanism for delivering work which will protect, conserve and enhance biodiversity that is considered important and unique to the local area. A BAP is an evolving strategy and must be regularly monitored and reviewed.

A BAP is not a management plan. It looks broadly at habitats and species across the local area and works to identify actions that are needed to achieve the wider targets set within the BAP.

BAPs sometimes focus on the responsibility of a particular landowner, for example some business and private land owners have produced BAPs specifically for the land that they manage. However at a local level, a borough BAP engages both public and private landowners.

4. The origins of developing Local Biodiversity Action Plans

In 1992 the 'Earth Summit' was held in Rio de Janeiro and highlighted the importance of conserving biodiversity, resulting in the Convention of Biological Diversity signed by 150 nations, which included the UK Government. By doing so the UK Government made a commitment to developing a national strategy for the protection and sustainable use of biodiversity.

In 1994 the UK Government published a report entitled 'Biodiversity: The UK Action Plan'. This was a broad strategy for conserving and enhancing wild species and wildlife habitats in the UK for the next 20 years. The overall goal was 'to conserve and enhance biological diversity within the UK and to contribute to the conservation of global biodiversity through all appropriate mechanisms'.

The UK Biodiversity Steering Group was then formed and produced a report, which set out how the UK Action Plan was to be achieved. This report highlighted that broadening public involvement in conserving biodiversity and conservation work at a local level was required in order to deliver the UK Action Plan. Local BAPs were felt to be the appropriate mechanism for achieving these goals.

In 2001 the first round of action plans were published as part of the London BAP. Currently the action plans within the London BAP are being reviewed, to meet changes in how BAPs are delivered nationally. The Harrow BAP has followed, where appropriate, the guidance issued for reviewing the London BAP.

As a result of the London BAP, many London Boroughs have since produced their own BAPs. It is by producing these local BAPs that biodiversity which is considered important within the borough is

protected and enhanced. Not only do these local BAPs conserve biodiversity locally, but they also contribute to achieving the wider goals of the London BAPs and the UK Action Plan.

In June 2002 the Mayor of London produced the 'Mayor's Biodiversity Strategy'. The strategy highlights that 'It is essential for the effective implementation of this Strategy, and of the London BAP, that all borough councils establish partnerships to produce and implement local BAPs'.

5. Why does Harrow need a Biodiversity Action Plan?

There are many dedicated local individuals, voluntary organisations, landowners and council officers who are aware of the importance of biodiversity. It is realised that within a London Borough there is an ever increasing pressure placed upon our green spaces, for example from growing housing needs, industrial and recreational uses. It is therefore essential that those concerned with biodiversity and its future, work together to enhance and protect the biodiversity that is important within Harrow.

A BAP is regarded as the appropriate strategy to bring those concerned about biodiversity together. Thus enabling various actions to be implemented, which not only conserve biodiversity locally but also enable Harrow to assist in the delivery of the UK Action Plan, London BAP and the Mayor's Biodiversity Strategy.

6. The Harrow Biodiversity Partnership

In August 2006 the Harrow Biodiversity Partnership was formed. Best practice guidance on the production of successful local BAPs advocates a partnership approach. This is because by having a partnership, expertise and resources are brought together. The Harrow partnership has highlighted the wealth of knowledge held by local wildlife enthusiasts and this has been invaluable in producing the Harrow BAP.

Currently the Harrow Biodiversity Partnership consists of the individuals, organisations and land owners listed in the table below. The members of the partnership have taken on differing roles in delivering this Harrow BAP. Some members have been involved in drafting the action plans themselves while others have adopted the role of being the lead person for an action plan. This means that they have co-ordinated the production of the action plan and will continue this co-ordinating role when the action plan is implemented. Other members have expressed an interest in taking part in actions, relevant to their work, when the Harrow BAP is implemented. In this way, the Harrow BAP has secured significant investment in time and commitment from its stakeholders and contributors, which gives the document greater weight and relevance and will help ensure its implementation in the future.

6. The Harrow Biodiversity Partnership

A number of the members of the Harrow Biodiversity Partnership are member of Greener Harrow. Greener Harrow is a sub group of the Sustainable Development and Enterprise Management Group (SD&EMG), one of the five management groups within the Harrow Strategic Partnership. Greener Harrow represents a number of Harrow Council departments along with a wide range of community groups. Primarily the aim of Greener Harrow is to proactively and reactively inform the SD&EMG on issues within Greener Harrow's remit. Green Harrow is primarily interested in issues surrounding sustainable development such as; the natural environment, climate change, resources, biodiversity, built environment, transportation.

In the preparation of the BAP, Greener Harrow has been used as a forum to help to inform what is felt to be of importance within Harrow and several presentations about the progress of the BAP have been made to this group.

It is essential that the BAP is regularly monitored within the Harrow Council and that progress is reported to all relevant parties, both within Harrow Council and externally. Greener Harrow is felt to be the most appropriate forum for the BAP's progress to be reported to.

Harrow Biodiversity Partnership

• Bentley Wood High School	• Hertfordshire & Middlesex Branch of Butterfly Conservation
• Earth Project	• Harrow Weald Conservators
• Greener Harrow	• Herts and Middlesex Bat Group
• Grim's Dyke Golf Club	• Peterborough & St Margaret School
• Grim's Dyke Hotel	• Pinner Hill Golf Club
• HA21	• Royal National Orthopaedic Hospital
• Harrow Bee Keepers Association	• St. Dominics 6th Form College
• Harrow in Leaf	• Stanmore Golf Club
• Harrow Natural History Society	• The Clementine Churchill Hospital
• Harrow Heritage Trust Harrow Nature Conservation Forum	• The London Wildlife Trust

It should be noted that the Harrow Biodiversity Partnership is not a static group. Instead it will evolve into a wider group as the Harrow BAP is implemented. If you or your organisation would like to become involved in the Harrow BAP, please contact ldf@harrow.gov.uk

7. Policy Context for the Harrow Biodiversity Action Plan

In 2006 the Natural Environment and Rural Communities Act was enacted and introduced a duty for every public body to conserve biodiversity. Section 40 of this Act provides that 'every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity'. This duty aims to raise the profile and visibility of biodiversity, clarify existing commitments with regard to biodiversity, and make biodiversity a natural and integral part of policy and decision making.

Although this new duty covers all aspects of the Council's work, the guidance document produced for public bodies highlights the particular importance of Local BAPs and states 'it is important for public authorities to develop corporate biodiversity objectives, developing and utilising BAPs as appropriate.' It is also anticipated that the Harrow BAP can act as a tool for raising the profile of this new duty within the Council and also other public bodies operating within Harrow.

Harrow Council recently also signed the Nottingham Declaration. By signing this declaration Harrow Council pledged to actively tackle climate change in Harrow and work with others to reduce emissions country-wide. It is recognised that biodiversity will be effected by climate change, although the full extent of the impact is currently unknown. It is therefore likely that the approach to managing biodiversity in Harrow will need to keep evolving in order to reduce the impact of climate change.

The Harrow Council Nature Conservation Strategy, aims to ensure the conservation, protection and enhancement of wildlife and its habitats in Harrow for current and future generations. It states that the 'development and implementation of a BAP is essential in achieving this aim.'

The Sport, Recreation and Open Space Strategy addresses the important role which parks and open space have in supporting biodiversity. It is recognised that a balance between management for biodiversity and public usage is required. A proposed action in the strategy is to develop a BAP.

The Harrow Green Belt Management Strategy, sets a series of objectives to conserve and enhance biodiversity within the green belt. There are also a number of actions explicitly relating to developing and implementing a BAP.

The Scrutiny Review of Public Green Spaces, recommended the development of a BAP and a Habitat Action Plan for private gardens and open spaces.

7. Policy Context for the Harrow Biodiversity Action Plan

The Harrow Unitary Development Plan 2004 (Harrow UDP 2004), soon to be replaced by the Harrow Local Development Framework (Harrow LDF), will contain policies which have been informed by the Harrow BAP. As part of the transitional phase, by a direction from the Secretary of State, fifty-six policies of the Harrow UDP 2004 were permanently deleted. This is because the policies repeat and/or are inconsistent with national or regional policy. In the interim, relevant policies in the London Plan, the London Plan Further Alterations and 'saved' policies of the Harrow UDP 2004 will apply.

The following are saved policies within Harrow UDP 2004, which deal with biodiversity

Habitat Creation and Enhancement

EP26 THE COUNCIL WILL ENCOURAGE CONSERVATION OF WILDLIFE THROUGH THE PROTECTION OF EXISTING, AND CREATION OF NEW, HABITATS AND WILL ENDEAVOUR TO TAKE ADVANTAGE OF OPPORTUNITIES PRESENTED VIA THE DEVELOPMENT CONTROL PROCESS TO CREATE AND ENHANCE LANDSCAPE AND NATURE CONSERVATION FEATURES, AND IMPROVE PUBLIC ACCESS WHERE APPROPRIATE. WHERE DEVELOPMENT PROPOSALS WOULD ADVERSELY AFFECT FEATURES OF NATURE CONSERVATION VALUE, THE COUNCIL WILL REQUIRE THE PROTECTION OR REPLACEMENT OF SUCH FEATURES.

Species Protection

EP27 DEVELOPMENT THAT IS LIKELY TO CAUSE HARM TO PROTECTED SPECIES OR THEIR HABITATS WILL NOT BE PERMITTED UNLESS THERE ARE OVERRIDING MATERIAL CONSIDERATIONS WHICH OUTWEIGH THE NEED TO MAINTAIN HABITATS OF AFFECTED SPECIES IN AN UNALTERED AND UNDISTURBED STATE. WHERE AN ADVERSE IMPACT IS LIKELY TO OCCUR, APPROPRIATE COMPENSATORY AND/OR MITIGATING MEASURES WILL BE REQUIRED.

Conserving and Enhancing Biodiversity

EP28 THE COUNCIL WILL CONSERVE AND ENHANCE BIODIVERSITY BY:-

- A) RESISTING DEVELOPMENT THAT WOULD HAVE A DIRECT OR INDIRECT ADVERSE IMPACT ON SITES OF SPECIAL SCIENTIFIC INTEREST, STATUTORY LOCAL NATURE RESERVES, OTHER SITES OF IMPORTANCE FOR NATURE CONSERVATION, COUNTRYSIDE CONSERVATION AREA AND GREEN CORRIDORS;
- B) ENSURING THAT ALL DEVELOPMENT PROPOSALS TAKE ACCOUNT OF NATURE CONSERVATION WHERE RELEVANT AND ENSURING THAT ALL DEVELOPMENT

- PROPOSALS CONSIDERED LIKELY TO MATERIALLY AFFECT SITES OF NATURE CONSERVATION IMPORTANCE TAKE INTO ACCOUNT THEIR IMPACT ON WILDLIFE AND THE ECOLOGY OF THE SITE;
- C) ENCOURAGING DEVELOPERS TO RETAIN HABITATS AND FEATURES OF VALUE TO ENHANCE THE NATURE CONSERVATION INTEREST OF SITES AND MAKE PROVISION, WHERE APPROPRIATE, FOR PEOPLE TO ENJOY THESE FEATURES;
 - D) IDENTIFYING SITES FOR STATUTORILY AND LOCALLY DESIGNATED NATURE RESERVES IN CONSULTATION WITH ENGLISH NATURE AND REGIONAL AND LOCAL NATURE CONSERVATION GROUPS;
 - E) WHERE THE COUNCIL CONSIDERS IT APPROPRIATE, REQUIRING DEVELOPERS TO DEMONSTRATE HOW THEIR PROPOSAL WILL IMPACT UPON WILDLIFE AND NATURAL FEATURES AND CONTRIBUTE TO CONSERVING AND ENHANCING BIODIVERSITY IN THE BOROUGH; AND
 - F) ENSURING THAT ANY LOSS OF HABITAT E.G. WOODLAND, WETLAND ETC., IS COMPENSATED FOR BY PROVISION OF AT LEAST AN EQUIVALENT AREA OF LAND OF EQUIVALENT HABITAT QUALITY UNDER THE TERMS OF A PLANNING OBLIGATION.

Within the context of planning policy and decisions, BAPs play an important role. The London Plan policy 3D.12 states that 'the Mayor will and boroughs should resist development that would have a significant adverse impact on the population or conservation status of protected species or priority species identified in the London BAP and borough BAPs'.

Protected species are those species protected by law, usually under the Countryside and Rights of Way Act 1981 (as amended) and the Conservation (natural Habitats & c.) Regulations 1994. Priority species are species, which have been identified as requiring conservation under the National, London and Local BAPs.

8. Aims and objectives of the Harrow Biodiversity Action Plan

The main aim of the Harrow BAP is to conserve, protect and enhance the biodiversity of the London Borough of Harrow.

The objectives of the Harrow BAP are

- To audit biodiversity on an ongoing basis.
- To implement and influence, where possible, the National and London targets for habitats and species found in the London Borough of Harrow.

9. What biodiversity exists within Harrow

- To raise awareness of biodiversity issues and to improve availability of information to all residents of the Borough.
- To encourage local people to be involved in biodiversity issues.
- To ensure that a long-term strategy to conserve, protect and enhance biodiversity exists, that it is regularly reviewed and informs other relevant strategies in the borough.

9. What biodiversity exists within Harrow

In order to select what biodiversity the Harrow BAP will focus upon, it is essential to gain an understanding of the habitats and species found within Harrow.

In Harrow a number of sites have been designated as Sites of Importance for Nature Conservation (SINCs). SINCs designated before 2003 are identified within the Harrow Unitary Development Plan Proposals Map. A number of new sites were recommended for designation by the Greater London Authority (GLA) in 2003, however these sites have not yet been formally adopted. The adoption of these sites was proposed under the Core Strategy Issues and Options Report and will occur within the LDF process, appearing on the proposals map.

A number of different grades of SINCs exist within Harrow reflecting the existing variety and quality of biodiversity found within the Borough. Sites of Metropolitan Importance are those sites which contain the best examples of London's habitats.

Sites of Borough Importance are important on a borough perspective in the same way as the Metropolitan sites are important to the whole of London. These sites are divided into two classes, class one offering a greater value to biodiversity.

Sites of Local importance are sites that are of particular value to people nearby such as residents or schools.

9. What biodiversity exists within Harrow

The following is a list of SINCs, including sites that have been adopted and those proposed to be adopted.

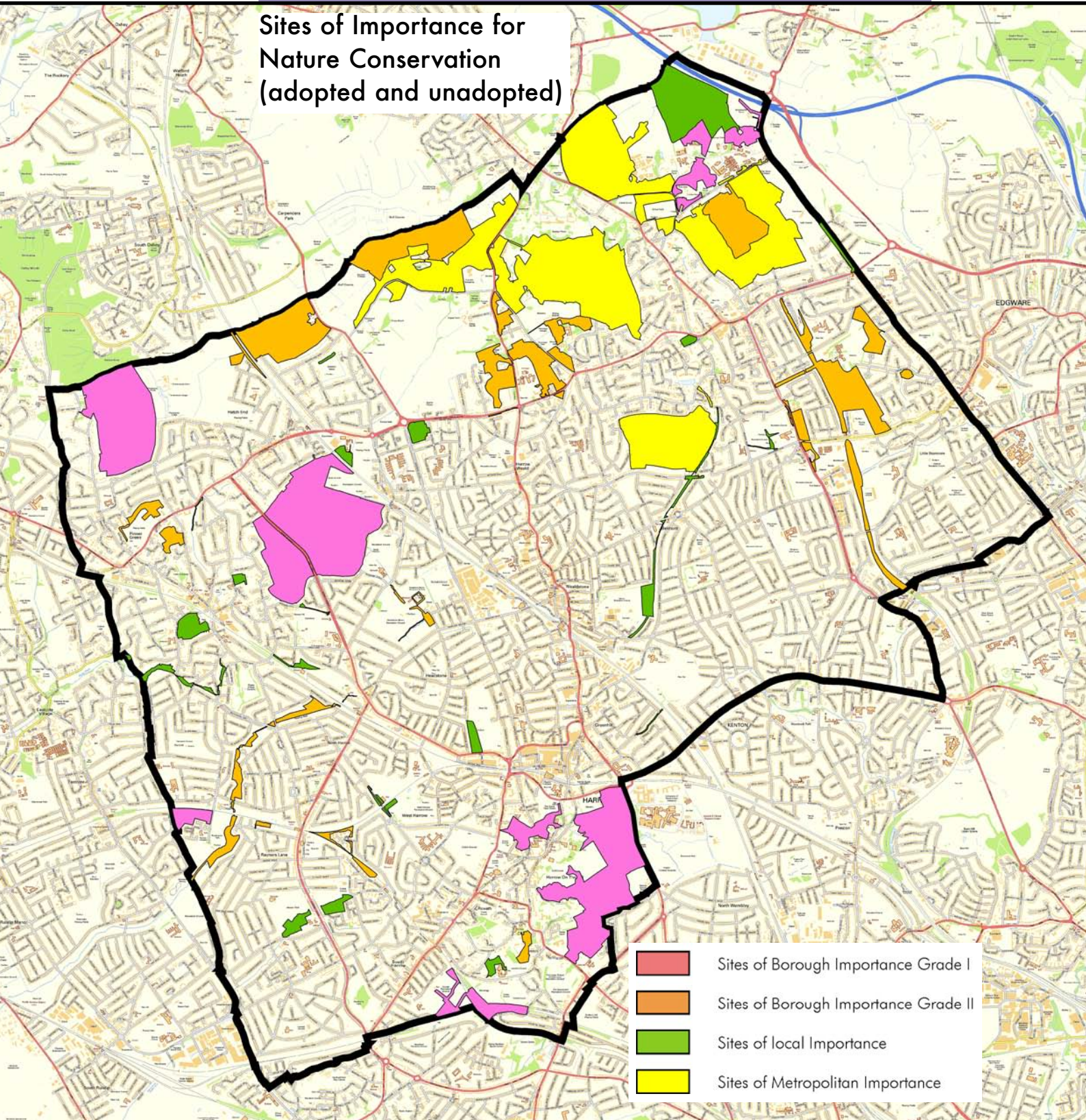
Site Name	Adopted	Grade
Bentley Priory Open Space	Yes	Sites of Metropolitan Importance
Harrow Weald Common	Yes	Sites of Metropolitan Importance
Pear Wood and Stanmore Country Park	Yes	Sites of Metropolitan Importance
Stanmore and Little Commons	Yes	Sites of Metropolitan Importance
Stanmore Golf Course	Yes	Sites of Metropolitan Importance
Harrow on the Hill	Yes	Sites of Borough Importance Grade I
Pinner Park Farm	Yes	Sites of Borough Importance Grade I
Pinnerwood Park and Ponds	Yes	Sites of Borough Importance Grade I
Roxbourne Rough Nature Reserve	Yes	Sites of Borough Importance Grade I
Royal Orthopaedic Hospital	Yes	Sites of Borough Importance Grade I
Wood End Railway Crossing & Roxeth Park	Yes	Sites of Borough Importance Grade I
Canons Lake and The Basin	Yes	Sites of Borough Importance Grade II
Canons Park and Stanmore Railway Embankments	Yes	Sites of Borough Importance Grade II
Clamp Hill Brickfields	Yes	Sites of Borough Importance Grade II
Grim's Ditch and Pinner Green	Yes	Sites of Borough Importance Grade II
Grim's Dyke Farm	No	Sites of Borough Importance Grade II
Harrow Weald Park and the Hermitage	Yes	Sites of Borough Importance Grade II
Headstone Manor Recreation Ground	Yes	Sites of Borough Importance Grade II
Oxhey Lane Fields and Railway Cutting	Yes	Sites of Borough Importance Grade II
Rayners Lane Rainside Lands	Yes	Sites of Borough Importance Grade II
St Dominic's Sixth Form College	No	Sites of Borough Importance Grade II
Stanmore Marsh	Yes	Sites of Borough Importance Grade II

9. What biodiversity exists within Harrow

Site Name	Adopted	Grade
The Grail Centre	No	Sites of Borough Importance Grade II
Wood Farm	Yes	Sites of Borough Importance Grade II
Yeading Brook	Yes	Sites of Borough Importance Grade II
Bonnarsfield Lane	Yes	Sites of Local Importance
Edgwarebury Brook at Whitchurch School	No	Sites of Local Importance
Grim's Dyke at Saddlers Mead	No	Sites of Local Importance
Harrow Arts Centre	No	Sites of Local Importance
Harrow Cemetery	Yes	Sites of Local Importance
Newton Park and Newton Park Ecology Centre	Yes	Sites of Local Importance
Old Tennis Court, West Harrow Recreation Ground and The Ridgeway Embankment	Yes	Sites of Local Importance
Orley Farm School Nature Conservation Area	No	Sites of Local Importance
Paine's Lane Cemetery	No	Sites of Local Importance
Pinner Memorial Park	Yes	Sites of Local Importance
Pinner New Cemetery Footpath	No	Sites of Local Importance
River Pinn at West Harrow	Yes	Sites of Local Importance
St John the Evangelist Churchyard, Stanmore Park	No	Sites of Local Importance
The Cedars Open Space	Yes	Sites of Local Importance
The Rattler including Belmont Nature Walk	Yes	Sites of Local Importance
Watling Chase planting site and environs	No	Sites of Local Importance
Watling Street Verge	No	Sites of Local Importance
Woodlands Open Space Spinney & Melrose Allotments	No	Sites of Local Importance
Woodridings Brook	No	Sites of Local Importance

9. What biodiversity exists within Harrow

Sites of Importance for Nature Conservation (adopted and unadopted)



9. What biodiversity exists within Harrow

In addition to SINCs a number of sites receive additional designations. Bentley Priory Open Space is designated as a Site of Special Scientific Interest (SSSI), therefore being one of the country's very best wildlife sites. Bentley Priory Open Space is comprised of intricate mosaic of unimproved neutral grassland, ancient and long-established woodland, scrub, wetland and open water. This combination of habitats is uncommon in London, causing the site to receive this extra designation. Section 28G of the Wildlife and Countryside Act 1981 (as amended) states that public bodies must 'take reasonable steps, consistent with the proper exercise of their functions, to further the conservation and enhancement of SSSIs'.

Bentley Priory Open Space, Stanmore Common and Stanmore Country Park have been designated as Local Nature Reserves. These are places with wildlife features that are of special interest locally and are accessible by the public.

Alongside knowledge about these designated sites, we also have a wealth of data which refers to the habitats and species found in the borough. In 1984 the London Ecology Unit undertook a phase 1 habitat survey, and this process was repeated in 2003 by the GLA. The survey undertaken in 2003 has been digitised and added to a London wide database managed by Greenspace Information for Greater London (GIGL) is the capital's open space and biodiversity records centre, who collate, manage and make available detailed information on London's wildlife, parks, nature reserves, gardens and other open spaces.. In 2006, Harrow Council entered into a service level agreement with GIGL, who now manage all ecological records on behalf of the council. Currently there are 30167 records of species in Harrow, the majority of these records have been collected by volunteers in the borough.

GIGL have also compared the 1984 survey with the survey undertaken in 2003 to ascertain what gains or losses of habitat types had occurred between the two surveys. This information is given in the table below.

9. What biodiversity exists within Harrow

Sum of Area change (ha)	Original habitat	Acid grass	Allotments (active)	Amenity grassland	Bare artificial habitat	Improved or re-seeded agricultural grassland	Native broadleaved woodland	Neutral grassland (semi-improved)	Non-native broadleaved woodland	Roughland (intimate mix of 9, 14 and 6)	Ruderal or ephemeral	Scattered trees	Vegetated walls, tombstones etc.	Grand total of habitat gained
	Unknown habitat			0.28								0.11		0.39
	Acid grassland													
	Amenity grassland	4.71			0.33	18.19		1.96		0.37		1.69	2.00	29.26
	Bare artificial habitat	0.11	0.68	39.86		4.53	25.09			61.67		2.66	0.40	135.07
	Native broadleaved woodland	0.56		0.51			0.11	1.78			2.38		2.36	7.70
	Native hedge	0.41		0.05										0.46
	Neutral grassland (herb-rich)		0.36											
	Neutral grassland (semi-improved)		2.33	1.69	0.08	0.78						0.37	0.12	5.37
	Non-native broadleaved woodland			0.62				0.51	0.08		1.97		0.15	3.34
	Non-native hedge		0.06											0.06
	Orchard		0.05											0.05
	Other	1.06			0.03							0.09		1.19
	Planted shrubbery			1.90				0.33		0.07				2.29
	Roughland (intimate mix of 9, 14 and 6)		0.30	2.07	0.83						10.08			13.28
	Ruderal or ephemeral		2.18	0.20	0.42									2.80
	Sum of Area change (ha)													
	Scattered trees	1.12	0.06	5.37	0.19					0.24		0.21		7.25
	Scrub	0.14	0.30	0.15	0.11			0.53		1.37	0.00			2.60
	Standing water (includes canals)			0.27										0.38
	tall herbs	0.11										0.41	0.23	1.81
	lypha etc.													
	swamp	0.11		0.32									0.08	0.51
	Vegetated walls, tombstones etc.													
	Wet marginal vegetation												0.04	0.04
	Wet marginal vegetation	0.03		0.06									0.16	0.25
	Grand total of habitat lost	1.19	7.26	6.50	2.64	23.51	25.20	5.11	0.08	64.70	14.42	5.24	5.84	215.08

10. Selecting important habitats and species

It has already been explained that biodiversity encompasses all species of plants and animals living on this earth. Therefore it is almost impossible for the Harrow BAP to conserve all biodiversity found within Harrow. Instead local BAPs focus on producing a series of action plans for the habitats and species considered to be locally important. These action plans follow a set format, to ensure that all local BAPs are comparable with one another.

The UK Local Issues Advisory Group produced a series of criteria for local biodiversity partnerships to use when deciding which habitats and species are important. The London Biodiversity Partnership adapted these criteria to be relevant within London Boroughs. The criteria for selecting habitats are:

- All UK priority habitats should be considered as a matter of course (e.g. heathland)
- Habitats for which Harrow contributes a significant proportion of the total London resource
- Habitats that can be effectively enhanced locally
- Habitats declining locally
- Habitats that are rare locally with a long history and/or formerly more widespread
- Habitats threatened in the borough
- Habitats important for key species
- Habitats distinct to the borough, and those that could be used to raise the profile of Local BAPs

Based upon these criteria the following habitat action plans are included with the Harrow BAP.

- Bare ground
- Decaying Timber
- Gardens and Allotments
- Grassland
- Heathland
- Parks
- Standing and Running Water
- Wasteland
- Woodlands

Many species will be conserved as a result of works to the habitat, which they relate to. However there are instances when specific species action plans are needed. For example some species use a wide variety of habitats, whilst other species maybe especially important within the local area. The criteria for selecting species are:

- All London priority species, especially if there is much potential locally to contribute towards national species targets
- Species virtually unique to the borough or London with a significant proportion of the national population
- Species declining, assessed where possible over the last 25 years
- Rare species resident in the Borough (i.e. not those passing through)
- Species threatened locally by, for example, lack of management, recreation, pollution, development
- Species distinct to the borough, especially also if it has a high profile or is popular
- Species that serve as good indicators of habitat and/or habitat quality

Based upon these criteria the following species action plans are included with the Harrow BAP

- Bats
- Heath Spotted Orchid
- Reptiles and Amphibians
- Southern Wood Ants

It is possible that the need for additional habitat and species action plans will become apparent during the implementation of the Harrow BAP. These will be drafted as necessary. There are also a number of actions needed to conserve biodiversity, which do not correspond to a particular habitat, or specie and these are dealt with under a Generic Action Plan.

11. Monitoring the Harrow BAP

It has already been highlighted that the Harrow BAP will not only conserve biodiversity locally but will also contribute to the achievements of the UK Action Plan and the London BAP. In order for the achievements of the Harrow BAP to be recorded, all actions within the Harrow BAP will be entered onto the Biodiversity Action Recording System (BARS). This is a web based information system that supports the planning, monitoring and reporting requirements of national, local and company BAPs. When actions are completed this will be recorded on BARS. Everyone is able to access the information held by BARS, allowing users to learn about the progress being made with local and national BAPs. For further information please see www.ukbapreporting.org.uk/default.asp

References

HMSO (1994) Biodiversity: The UK Action Plan and Summary Report.

Defra (2007) Biodiversity indicators in your pocket 2007 Measuring our progress towards halting biodiversity loss.

Greater London Authority (2002) Connecting with London's Nature. The Mayor's Biodiversity Strategy.

Defra (2007) Guidance for Local Authorities on Implementing the Biodiversity Duty.

Harrow Council (1999) Harrow Council Nature Conservation Strategy

Harrow Council (2005) Sport, Recreation and Open Space Strategy

Harrow Council (2006) Harrow Green Belt Management Strategy

Harrow Council (2006) Scrutiny Review of Public Green Spaces

Harrow Council (2004) Harrow Unitary Development Plan

London Ecology Unit (1989) Nature Conservation in Harrow Ecology Handbook 13

There are a number of actions required as part of the Harrow BAP, which do not fall within the remit of the individual habitat and species action plans. These actions are more general and cover a broad range of conservation issues.

1. Targets and Actions

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.

Policy and Strategy

Target 1 Increase awareness amongst Planning Officers, Councillors and private developers of the importance of biodiversity in Harrow by 2013

Action	Target Date	Lead	Other Partners
1. Adopt using the Association of Local Government Ecologist planning application validation checklists	2008	LBH	
2. Provide training for planning administration staff and officers about the new validation checklists	2008	LBH	
3. Make validation checklist available on planning pages of the council's website	2008	LBH	
4. Monitor the use of the new system	2008-2013	LBH	
5. Produce and disseminate guidance notes about protected and priority species to all Development Control Officers	2008	LBH	
6. Promote Natural England training to Development Control Officers when available	2013	LBH	
7. Produce and disseminate guidance notes about protected and priority species to private developers	2008	LBH	

Target 2 Maximise the beneficial impact of future developments on biodiversity by 2013

Action	Target Date	Lead	Other Partners
1. Contribute to the drafting of the Supplementary Planning Document for Planning Obligations/Section 106	2009	LBH	
2. Seek to maximise the benefits for biodiversity through good design following Planning Policy Statement 9	2008-2013	LBH	

Target 3 To deliver and monitor the Harrow BAP ensuring that it either complements or assists in delivering neighbouring boroughs' and the London BAPs by 2013

Action	Target Date	Lead	Other Partners
1. Continuation of BAP Officer Post	2008	LBH	HBP
2. Creation of additional nature conservation post to be externally funded	As necessary	LBH	External Funding bodies
3. Harrow Council to continue to support the Harrow Biodiversity Partnership	2008-2013	LBH	
4. A representative of the Harrow Biodiversity Partnership to attend relevant London BAP working group meetings	2008-2013	LBH	HBP
5. Enter into a Memorandum of Understanding with London Biodiversity Partnership	2009	LBH	LBP
6. Develop a overall funding programme to deliver the Harrow BAP	2008-2013	LBH	All other partners, HA21
7. Develop and maintain links with neighbouring borough councils and the London Biodiversity Partnership	2008-2013	LBH	
8. All habitat and species action plan lead persons to be trained to use the Biodiversity Recording System	2008-2013	LBH	HBP
9. Produce an annual work programme for the Harrow BAP	2008-2013	LBH	HBP
10. All progress of habitat and species action plans to be monitored annually and report to Greener Harrow	2008-2013	LBH	HBP
11. Based on ecological monitoring, produce a list of additional habitats and species requiring action plans	2008-2013	LBH	HBP
12. Review and update the Harrow BAP	2012	LBH	HBP
13. Officer to represent Harrow Council at the London Biodiversity Forum meetings	2008-2013	LBH	

Habitat Management and Creation

Target 1 Incorporate management prescriptions to conserve and enhance biodiversity into the overall management regime of all council managed land by 2013

Action	Target Date	Lead	Other Partners
1. Identify sites which would benefit in alterations in the management regime to benefit biodiversity	2008	LBH	
2. Develop a list of management prescriptions which conserve and enhance biodiversity	2009	LBH	
3. Work with site managers to implement appropriate management prescription on sites, where funding allows	2009-2013	LBH	

Target 2 To maximise the biodiversity value of land within Harrow eligible to enter Defra agri-environment schemes by 2013

Action	Target Date	Lead	Other Partners
1. Encourage agricultural holdings to enter Defra agri-environment schemes	2011	LBH	Land owners
2. Investigate the business case of developing a multiple site Defra Higher Level Scheme application for council owned sites	2010	LBH	HNCF
3. Develop an application if there is a business case	2011	LBH	HNCF

Advisory

Target 1 To support and encourage land owners and managers to manage their land in a positive way for biodiversity by 2013

Action	Target Date	Lead	Other Partners
1. Develop a list of landowners in the borough	2008	LBH	
2. Organise training workshops for land managers and owners in conjunction with habitat and species action plans	2008-2013	LBH	
3. Produce, disseminate and regularly update a list of funding opportunities for environmental improvements	Annually	LBH	
4. Develop and disseminate guidance notes about site management best practice for wildlife to council employees and contractors	2009	LBH	
5. Develop and pilot an education pack for schools to assist integrating wildlife education into the national curriculum	2013	LBH	HA21 Education Group
6. Provide advice to schools about developing and maintaining wildlife areas.	2008-2013	LBH	HA21 Education Group

Research and Monitoring

Target 1 To develop and maintain a structured approach to ecological monitoring across Harrow by 2013

Action	Target Date	Lead	Other Partners
1. Recruit new volunteer local recorders and develop a programme of training days/workshops and press releases	2008-2013	LBH	
2. Develop an ongoing programme of ecological recording with local recorders in conjunction with habitat and species action plans	2008-2013	LBH	Volunteer recorders
3. Run an annual public wildlife survey	Annually	LBH	Volunteer recorders, public
4. Continue Service Level Agreement with GIGL Information for Greater London	Annually	LBH	GIGL
5. Encourage all local recorders to share records with GIGL	2008-2013	LBH	GIGL, Volunteer recorders

Target 2 To identify locations of problem invasive species and develop an ongoing programme of control and monitoring by 2013

Action	Target Date	Lead	Other Partners
1. Identify problem invasive species in the borough	2008-2013	LBH	Public
2. Co-ordinate a programme of control and monitoring with involvement from private land owners, managers, neighbouring borough council's and the Environment Agency	2008-2013	LBH	Various partners

Raising Awareness

Target 1 To raise overall awareness and knowledge of the importance biodiversity by 2013

Action	Target Date	Lead	Other Partners
1. Develop the Earth Project to provide opportunities for education about biodiversity issues	2008-2013	LBH	Earth Project
2. Encourage public involvement in projects delivering Action Plan objectives, through organising a programme of training/awareness raising events i.e. guided walks, practical work parties	2008-2013	LBH	Various partners
3. Develop interpretative material and temporary signage for use on sites, explaining the benefits of wildlife friendly management	2008-2013	LBH	
4. Maintain awareness within the council and other public bodies within Harrow about their duty of care under Natural Environment and Rural Communities Act 2006	2008-2013	LBH	Other public bodies in Harrow
5. To develop a public display, which includes a suite of children's activities, to be used at general public events to promote the BAP	2008	LBH	HA21 Education Group
6. Develop a section on the Harrow Council website which promotes biodiversity and the Biodiversity Action Plan	2008	LBH	HBP
7. Investigate which sectors of Harrow's community are currently under represented in nature conservation activity and why they are under represented.	2009	LBH	
8. Run a series of events aimed at increasing involvement from these groups	2008-2013	LBH	
9. Ensure that when leaflets are produced that they are produced in the languages of under represented groups,	2008 - 2013	LBH	
10. Provide support to established friends of groups and also residents seeking to form groups.	2008 – 2013	LBH	

11. Identify project on sites within areas of deficiency in access to nature or deprived areas of the borough.	2008 - 2013	LBH	
12. Work with residents to seek funding and deliver projects identified in above action	2008 – 2013	LBH	

Target 2 In collaboration with the Harrow Green Belt Management Strategy seek to provide an education centre within the Green Belt by 2013

Action	Target Date	Lead	Other Partners
1. Identify suitable a location for a centre	2008	LBH	
2. Identify what opportunities and facilities such a centre should offer, based on the needs of local schools and other facility within the local are	2008/9	LBH	HA21, HNCf, local schools
3. Devise and implement a capital and revenue funding strategy for the centre	2008 - 2010	LBH	HA21, HNCf, local schools
4. Develop a project plan	2008 - 2010	LBH	HA21, HNCf, local schools
5. Implement project plan	2013	LBH	HA21, HNCf, local schools

Abbreviations

GIGL - Greenspace Information for Greater London
 HA 21 Education Group - Harrow Agenda 21 Education Group
 HBP - Harrow Biodiversity Partnership
 HNCf - Harrow Nature Conservation Forum
 LBH - London Borough of Harrow
 LBP - London Biodiversity Partnership



1. Aims

- To raise awareness of the value of bare ground
- To ensure all existing bare ground habitats are managed appropriately
- To promote the benefits of brown roofs to developers and Development Control Planning Officers

2. Introduction

Bare ground often occurs naturally in areas with bare rock or thin, nutrient poor and drought prone soil. In some cases bare ground is artificially created and maintained by regularly removing the vegetation from the area. This could be to benefit wildlife associated with bare ground or to preserve an archaeological feature under the ground, which would otherwise be damaged by plant roots.

Wasteland or brownfield sites have also been found to support bare ground habitat. Artificial substrates, for example rubble from demolished buildings or car parks, provides a free draining, nutrient poor substrate ideally suited to wildlife associated with a bare ground habitat. Links can therefore be made with the Wasteland Habitat Action Plan, although it has been decided to keep these action plans separate. As the Bare Ground Action Plan seeks to protect and enhance bare ground as component in a wider mosaic of habitats.

Due to the lack of vegetation cover, soil under bare ground rapidly warms up in the sunshine, creating a microclimate. This warmth is important to invertebrates such as bees, wasps, flies, beetles, butterflies, moths, spiders and reptiles. They obtain their body heat from their surroundings and require warm conditions to complete their lifecycle. A warm animal also has the advantage of being able to move more quickly avoiding predation. Warm surroundings are also needed for the incubation of eggs and development of young.

Due to the visual appearance of bare ground habitats, it is possible that site managers and users do not appreciate that it is considered to be a habitat for wildlife. A considerable amount of work has been undertaken to raise awareness about the importance of brownfield sites for wildlife, particularly by Buglife as part of their 'All of a Buzz Project'.

Bare ground habitats can be created deliberately by scraping off the top soil from areas. Ideally the area should be about 20m² in size. If the site is sloping, the scraped area should be south facing. Bare ground areas can also be created naturally for example

- Slippage of soil under the influence of gravity
- Areas which are subjected to regular disturbance or erosion by animals or human activity
- Areas which are regularly subjected to fire
- Areas which hold insufficient water during the summer
- Areas which are subjected to prolonged flooding
- Exposed root plates of wind blown trees
- Over grazing by animals
- Areas with excessive shading i.e. under large trees

The harsh growing conditions associated with bare ground provide a unique environment. If plants are found growing on areas of bare ground, they are unlikely to be found elsewhere, as only a limited number of plant species can grow in these conditions, making these plants special. Many of these plants are referred to as being pioneer plants, meaning that they are the first plants to colonise an area. This is the first step in a process called ecological succession, which is the process by which vegetation naturally develops on an unmanaged piece of land.

Plants found in areas of bare ground have an important function, providing a source of food to plant eating invertebrates and also act as a host for some invertebrates that lay their eggs on plants. Many invertebrates are restricted to a particular plant only found within or adjacent to bare ground areas.

The soil type and structure is also of importance, as many invertebrates burrow within the soil for nesting or for hunting. It is important for the soil to be loose, to enable successful burrowing but equally to be firm enough to prevent the burrowed tunnels from collapsing.

3. Current Status

The GLA habitat survey performed in 2003 identified 23 locations which had areas of bare soils and rock. These areas ranged in size from 0.01 hectares to 1.62 hectares, 13 of these areas are within SINC.s.

Areas of Bare Ground in Harrow



4. Specific Factors Affecting Habitat

These are factors affecting the habitat currently either national, specifically in Harrow or both.

▪ **Human activity**

Activities such as walking, mountain biking, motorcycling and horse riding can cause damage to nesting and burrowing sites. It can also cause the soil to become compacted, making burrowing by invertebrates impossible.

▪ **Contamination**

Bare ground is often associated with brownfield sites, it is possible that the land maybe contaminated as a result of its previous industrial use. Depending upon the contaminants these may affect the wildlife found on the site.

▪ **Poor Management**

If left unmanaged bare ground will naturally become covered with vegetation. Therefore it is either necessary to manage the bare ground areas to prevent vegetation development, or to create a number of bare ground areas on an ongoing basis, which can be left to develop naturally.

▪ **Soil type**

Invertebrates which burrow within the soil are very specific about the soil type and structure. Bees and wasps favour light sandy soils, although compacted well drained clay may also be utilised. Therefore artificial bare ground patches should be created on areas with suitable soil type for the desired invertebrate species.

▪ **Development of Brownfield sites**

New developments are targeted on previously developed land known as brownfield, causing bare ground to be lost. It is possible to retain this feature by incorporating brown roofs into the development. These are flat roofs which are covered in crushed material from the development site. This means the potential for wildlife is retained on the site.

▪ **Public perception**

Often areas of lush vegetation are considered to be of high value to wildlife. However due to the visual appearance of bare ground habitat it is possible for this type of habitat to not naturally be associated with supporting wildlife.

▪ **Climate change**

Currently it is not know what the effects of climate change will be on wildlife. However it is expected that variations in weather patterns will have an effect on many species. For example populations of those species, which cannot tolerate high temperatures, are likely to decrease. Whilst species previously associated with warmer countries may start to appear in the UK. It is possible that seasonal patterns may also alter, which is likely to have an effect on the success of many breeding species.

5. Current Action

5.1 Legal Status

Bare ground as a habitat is not protect by law, nor are invertebrates the main species associated with this habitat. However reptiles are also associated with this habitat. Common lizards, slow worms and grass snakes are protected from being killed and injured under the Wildlife and Countryside Act 1981 (as amended) which may indirectly offer a degree of protection to bare ground habitats.

In addition the general duty in relation to biodiversity conservation under Section 40 of Natural Environment and Rural Communities Act 2006 will enable the need to conserve bare ground habitats to be considered whenever functions which have a bearing on the issue are exercised..

Mechanisms targeting the habitat

The following management and restoration actions are ongoing. They need to be supported and continued in addition to the action listed under Section 7.

▪ **Harrow Nature Conservation Forum**

The Harrow Nature Conservation Forum organised a survey of Wood Farm, which focused on invertebrates associated with bare ground.

▪ **Stanmore Common**

At Stanmore Common two large bare earth banks have been created as part of the heathland restoration works.

▪ **Great Brewers Pond**

The path on the east side of Great Brewers Pond near Stanmore Common, is known to support nesting solitary bees and wasps. The condition of the site is maintained by pedestrians, who create enough disturbance to prevent vegetation, but do not cause harmful disturbance.

6. Flagship Species

These special plants and animals are characteristic of bare ground in Harrow



Mining bees

A group of solitary bees which primarily nest in the ground.



Solitary wasps

A group of wasps which do not live in colonies and generally nest in the ground.



Kingfisher

Nesting sites are usually found within steep vertical earth bank.

7. Targets and Actions

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.

Please note that the partners identified in the tables are those that have been identified 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.

Policy and Strategy

Target 1 As an exemplar to have a brown roof incorporated into a development by 2013

Action	Target Date	Lead	Other Partners
1. Adopt using the Association of Local Government Ecologist planning application validation checklists	2008	LBH	
2. Distribute the Natural England leaflet to developers explaining the benefits of brown roofs	2008	LBH	
3. Highlight the importance of brown roofs to developers as part of the PAM and PAT process	2008-2013	LBH	
4. Work with a developer to approve a development incorporating a brown roof	2008-2013	LBH	Developer

Habitat Management and Creation

Target 1 Develop a program for creating new bare ground areas on suitable sites and maintain existing areas by 2011

Action	Target Date	Lead	Other Partners
1. Identify suitable sites for bare ground areas to be created	2009	LBH	HNCF, HBKA
2. Implement improvement works	2009-2011	LBH	HNCF
3. Review sites annually	2009-2013	LBH	HNCF
4. Review existing sites and implement management when needed	2009-2013	LBH	HNCF

Target 2 To create and monitor the usage of a kingfisher nesting bank by 2010

Action	Target Date	Lead	Other Partners
1. Assess current locations of kingfisher populations in the Harrow	2009	LBH	
2. Identify a suitable location for a kingfisher bank	2010	LBH	Landowner/manager
3. Obtain funding for project if necessary	2010	LBH	Landowner/manager
4. Construct Kingfisher bank	2010	Landowner/manager	LBH, HNCF
5. Perform annual monitoring	2010-2013	Landowner/manager	
6. Submit all records to GIGL	2010-2013	Landowner/manager	GIGL

Research and Monitoring

Target 1 Monitor known bare ground habitats annually

Action	Target Date	Lead	Other Partners
1. Develop a list of sites to be monitored annually	2009	LBH	
2. Monitor annually	Annually	LBH	HNCF
3. Submit all records to GIGL	Annually	LBH	GIGL

Raising Awareness

Target 1 Incorporate on an ongoing basis information about bare ground into leaflets/guidance material produced as part of the BAP

Action	Target Date	Lead	Other Partners
1. Where appropriate incorporate information regarding bare ground into other BAP publications	As necessary	LBH	

8. Other Relevant Action Plans

Harrow Biodiversity Action Plan

- Wasteland Habitat Action Plan

London Biodiversity Action Plans

- Wasteland Habitat Action Plan

Contact Details

Biodiversity Action Plan Officer
Harrow Council, Community & Environment,
3rd Floor,
P.O. Box 37,
Civic Centre,
Harrow
HA1 2UY
Tel 020 8736 6080
Email: ldf@harrow.gov.uk

Abbreviations

GIGL - Greenspace Information for Greater London
HBKA - Harrow Bee Keepers Association
HNCF - Harrow Nature Conservation Forum
LBH - London Borough of Harrow



1. Aims

- To prevent further reduction in diversity of current decaying timber, further erosion of the habitat, particularly unnecessary felling of trees or removal of decaying timber
- To develop local appreciation of decaying timber habitat and its associated biodiversity, and secure the involvement of local residents in its conservation
- To promote management of woodland in such a way as to achieve a steady increase in the short and long term quantity and quality of the decaying timber habitat

2. Introduction

Decaying timber or dead wood is a really poor label for something that sustains so much life, the role of decaying timber is generally little understood and even less appreciated. The wood-pastures of Harrow with their ancient trees and decaying timber component have some similarities with the original wildwood. Our native flora and fauna largely evolved in such conditions and a very high proportion - about 13% - of our native invertebrate animal and fungus species have life cycles making them dependent on the decaying timber environment at

some stage during their development. In total, almost 5,000 British species are known to be associated with decaying timber, but the true total is clearly far higher, as many species undoubtedly remain to be discovered and the life cycles of many others are unknown. Because the public are largely unfamiliar with these species, they are in most cases very poorly recorded, but they contribute enormously to our overall national biodiversity. All trees, including ornamental trees, are potential sources of decaying timber, whether they are in recognized woodlands, or as single specimens in parks, gardens, hedgerows, and avenues in towns. Occasionally, rare invertebrate species are found associated with individual trees well isolated from large woodlands.

In the Harrow area, such areas can be found in:

Nature Reserves (all under the control of local authorities)

Parks (also under the control of local authorities)

Private Estates and gardens

The conservation of decaying timber in situ will have other economic and environmental advantages such as reduction in transport costs and fuel usage, reduction in burning and landfill requirement.

3. Current Status

The habitat survey undertaken by the GLA in 2003 did not class decaying timber as a habitat type. Instead the presence of decaying timber at a site was recorded, along with other features of interest to wildlife. Across the borough 73 sites were recorded to contain a proportion of decaying timber.

4. Specific Factors Affecting the Habitat

These are factors affecting the habitat currently either national, specifically in Harrow or both.

▪ Realisation of importance

The primary factor affecting the decaying timber habitat is lack of appreciation of its importance by decision makers, woodland managers/workers and the general public. Mature and ageing trees are often felled and removed, and fallen or felled decaying timber cleared away, without understanding of the magnitude of the impact that this has on the wildlife in the area.

▪ Woodland reduction and fragmentation

Existing woodland with its compliment of decaying timber is under constant pressure. Any clearance whether for building, agriculture, or recreation has an impact on the fragile decaying timber habitat. Fragmentation of habitat arising from these factors ultimately leads to splitting of colonies of decaying timber species into smaller and smaller units which then cease to be viable and die out, reducing overall biodiversity. Some species of the decaying timber community are highly specialised, adapted to living in very specific and limited micro-habitats

within the decaying timber environment. Many of Britain's rarest and most endangered species are particularly susceptible to fragmentation or loss of habitat.

▪ **Woodland management**

Management of decaying wood is complicated because it is not a single habitat but consists of a complex series of changing microhabitats. Its value to different species not only depends on the length of time that it has been decaying but also on other factors, such as the time and cause of death, tree species, age range, aspect and the climate.

A number of specific primary micro-habitats can be recognised:

Dry dead heartwood,
Rotting heartwood,
Under dry dead bark,
Under wet rotting bark, particularly where fallen trunks/branches penetrate standing water (ponds & streams),
In rotting stumps,
In rotting tree roots - particularly within cavities filled with semi-liquid rot products,
Rot holes (water or detritus filled), often in otherwise healthy trees.

Traditional woodland management practices, which have historically helped to maintain a wide range of tree maturity, such as pollarding, have largely fallen into disuse. Dead trees or those containing decaying timber are viewed as diseased and as a risk of infection to the adjacent woodland and are often unnecessarily removed. It is also crucial to ensure that there is a continuity of supply of decaying timber. Old and diseased trees should not be singled out for removal - they are often the most important providers of habitat for invertebrate species. Fallen trunks, cut stumps and old and moribund trees with rot holes and other forms of decay are important to insects such as the nationally scarce hoverfly *Xylota abiens*, for example, as well as some of the larger Brachycera e.g. the Black fringed moss-snipefly (*Ptiolina obscura*) and the crane fly *Lipsothrix nervosa*, associated with wet decaying timber. Trees with sap flows are of particular importance to many insects such as hoverflies, and should be retained wherever possible. Decaying sapwood is also important for flies, as is decaying sap under bark.

▪ **Public perception**

Fallen or felled wood, particularly in public places or parkland may be cleared away in the name of 'tidiness'. Options of stacking it nearby or on neighbouring site may not be considered.

Trees located in private gardens represent another significant and generally misunderstood decaying timber resource.

▪ **Health and safety**

Obligations relating to ensuring health and safety of site users necessitate the removal of dangerous trees or tree limbs. This can result in trees or tree limbs containing deadwood being felled. These practice although necessary can deplete decaying timber provision.

5. Current Action

5.1 Legal Status

Decaying timber is not subject to any specific legal protection. Although Tree Preservation Orders (TPO) are used to protect trees which have high amenity value as individuals, groups, areas or woodlands, TPOs cannot be made to protect dead or dying trees. A TPO ordinarily prohibits the pruning and felling of protected trees without approval from the Council. Nonetheless there may be some instances of trees protected by TPOs beginning to show signs of partial decaying timber.

Similarly all trees in conservation areas (if they are over 7.5cm diameter, measured at 1.5m high on the stem/trunk) are protected from pruning, felling and destruction. Anyone intending to carry out works to trees in a conservation areas is required to give the Council at least six weeks written notice of intent to carry out works and obtain consent for doing so. Pruning and felling of trees in a conservation area without notice can result in a criminal offence under the Town and Country Planning Act 1990 (as amended).

Many birds use trees during the nesting season. All nesting birds are protected by the Wildlife and Countryside Act 1981 (as amended). Bat species are also known to roost in trees. All British bat species are given special protection in England by Schedule 2, Regulation 38 of the Conservation (Natural Habitats & c.) Regulations 1994 and Schedule 5, Section 9 of the Wildlife and Countryside Act 1981 (as amended)

In addition, the general duty to have regard to biodiversity conservation under Section 40 of the Natural Environment and Rural Communities Act 2006 extends to consideration of all biodiversity issues and not specific to a particular protected habitat or specie.

5.2 Mechanisms targeting the habitat

The following management and restoration actions are ongoing. They need to be supported and continued in addition to the action listed under Section 7.

▪ **Council policy for dealing with decaying timber**

In woodlands deadwood which is removed because it is on, hangs over or is close to paths or roads, is to be left on site and stacked in habitat piles.

▪ Creation of decaying timber piles at Stanmore Common

As part of works to restore heathland, considerable amount of decaying timber and trees were removed from the area. This was either stacked in piles or buried.

6. Flagship Species

These special plants and animals are characteristic of decaying timber in Harrow



Stag beetle

This is our largest insect: adult males can grow up to 7cm long. The larvae take about 5 years to develop into adults. They live in rotting stumps where they consume vast amounts of decaying wood. This is a threatened species in Britain and Europe.



Bats

Many bat species are known to use cracks in mature trees as roosting places. It is these trees which are likely to contain dead or decaying wood.



Bracket fungi

These fungi are characterised by bracket-shaped fruiting bodies. Many are found on dead wood.



Woodpecker

Woodpeckers are known for using stand dead trees to make nesting holes in.

7. Targets and Actions

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.

Please note that the partners identified in the tables are those that have been identified 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.

Policy and Strategy

Target 1 To ensure that appropriate policies are in place relating to the management of decaying timber on council managed sites by 2009

Action	Target Date	Lead	Other Partners
1. Collate and review all policies and working practices relating to woodland and open space management	2008	LBH	
2. If necessary update to include policies relating to decaying timber management	2009	LBH	
3. Implement new policies,	2009-2013	LBH	
4. Review policies if necessary	2009-2013	LBH	

Habitat Management and Creation

Target 1 Increase areas of decaying timber in parks and woodlands by 2013

Action	Target Date	Lead	Other Partners
1. When tree works are undertaken assess whether a wood pile can be created or if timber can be left as standing dead wood	2008-2013	LBH	HNCF
2. Review the locations of Stag Beetle records	2009	LBH	
3. Based upon previous actions findings, identify sites suitable for the creation of Stag Beetle loggeries	2009-2013	LBH	
4. Monitor the loggeries	2009-2013	LBH	
5. Submit all records to GIGL	2009-2013	LBH	GIGL

Target 2 Increase the retention of decaying timber in gardens and allotments by 2013

Action	Target Date	Lead	Other Partners
1. Incorporate information about decaying timber into any relevant literature developed as part of the Gardens Habitat Action Plan.	2008-2013	LBH	Harrow in Leaf
2. Incorporate information about decaying timber into workshop or wildlife gardening events	2008-2013	LBH	Earth Project
3. Run a series of press releases about Stag Beetles to highlight the value of deadwood	2008-2013	LBH	
4. Develop links with DIY supplier and tree contractors to provide residents and allotment holders with the equipment needed to make stag beetle buckets	2009	LBH	
5. Encourage residents and allotment holders to monitor the buckets for larvae	2009-2013	LBH	Harrow in LEAF
6. Submit all records to GIGL	2009-2013	LBH	GIGL
7. When permission from the council is required to fell a tree, highlight in correspondence the value of retaining the tree as standing timber (when safe to do so) or as a log pile. Highlight and recommend alternatives to felling such as major branch trimming, retaining the trunk, retaining a large stump, leaving jagged ends cuts to sawn faces	2008-2013	LBH	

Target 3 Increase the retention of decaying timber within schools grounds by 2013

Action	Target Date	Lead	Other Partners
1. Develop links with school grounds managers	2008	LBH	
2. Circulate a guidance note explaining the benefits of deadwood for wildlife and how it can be used as an educational tool	2008	LBH	
3. Incorporate deadwood piles into the creation/design of school wildlife areas	2008-2013	LBH	

Target 4 Advise private land owners, including leaseholder agricultural tenants, of the wildlife benefits of decaying timber by 2013

Action	Target Date	Lead	Other Partners
1. Develop a list of land owners/managers	2009	LBH	
2. Circulate a leaflet explaining best practice of decaying timber management and the associated wildlife benefits	2009	LBH	
3. If the site has limited decaying timber supply, develop links with tree contractors needing disposal sites	2009-2013	LBH	Tree contractors, land owners
4. If land owners are applying for Defra Entry Level Scheme encourage them to undertake options relating to decaying timber	2008-2013	LBH	Land owners

Advisory

Target 1 Provide advice to schools about how decaying timber can be used as an educational tool by 2009

Action	Target Date	Lead	Other Partners
1. Develop links with DIY supplier and tree contractors to provide schools with equipment needed to make a stag beetle buckets	2009	LBH	
2. Offer schools kits to make stag beetle buckets	2009	LBH	HA21 Education Group
3. Encourage schools to monitor the buckets for larvae	2009-2013	LBH	
4. Submit all records to GIGL	2009-2013	LBH	GIGL
5. Develop an activity sheet relating to deadwood to be incorporate into the school wildlife education pack	2009	LBH	HA21 Education Group
6. Include an article about decaying timber with the HA21 Education Group newsletter	2009	Caroline Williams	HA21 Education Group

Research and Monitoring

Target 1 To ascertain the proportion of residents and allotment holders who retain decaying timber or have provisions for stag beetles by 2013

Action	Target Date	Lead	Other Partners
1. For the surveying being performed as part of the Garden and Allotment Habitat Action Plan include a question relating to decaying timber	2008-2013	LBH	
2. For the surveying being performed as part of the Garden and Allotment Habitat Action Plan include a question relating to Stag Beetles	2008-2013	LBH	
3. Submit all records to GIGL	2008-2013	LBH	

Raising Awareness

Target 1 Promoting public awareness about the value of decaying timber by 2013

Action	Target Date	Lead	Other Partners
1. Incorporate info in other related leaflets and interpretation boards	2008-2013	LBH	
2. Develop display material to be used at public events and by schools.	2009	LBH	HA21 Education Group
3. Create a Stag Beetle bucket to display at events	2009	Caroline Williams	LBH

Target 2 Raise awareness amongst private tree contractors about the value of deadwood by 2013

Action	Target Date	Lead	Other Partners
1. Develop a list of private tree contractors operating in Harrow	2009	LBH	
2. Devise a postcard for contractors to give to clients highlighting the benefit of retaining the timber as standing decaying timber (when safe to do so) or as a log pile	2009	LBH	
3. Provide private tree contractors with details of how to create a Stag Beetle loggery	2009	LBH	

8. Other Relevant Action Plans

Harrow Biodiversity Action Plan

- Woodland Habitat Action Plan
- Garden and Allotment Habitat Action Plan
- Bats Habitat Action Plan

London Biodiversity Action Plans

- Woodland Habitat Action Plan
- Bats Habitat Action Plan

Contact Details

Caroline Williams, HA 21

Abbreviations

GIGL - Greenspace Information for Greater London
 HA 21 Education Group - Harrow Agenda 21 Education Group
 HNCF - Harrow Nature Conservation Forum
 LBH - London Borough of Harrow



1. Aims

- To encourage and support residents of Harrow to garden in a wildlife friendly manner
- Minimise the impact of developments upon gardens and allotments by incorporating relevant policies into the emerging Harrow Local Development Framework
- Establish a mechanism for monitoring wildlife within gardens and allotments

2. Introduction

It is widely recognised within the wildlife conservation fraternity that gardens and allotments can provide a haven for wildlife, especially within urban areas where open spaces are limited. There are many species of wildlife that thrive in gardens and allotments for example birds, butterflies, stag beetles and other invertebrates. The value of a garden for wildlife is thought to be higher if the garden is large, adjoins other habitats or contains a variety of habitats, for example a garden pond, long grass, decaying timber or shrubberies.

Therefore it was considered that a Garden and Allotments Habitat Action Plan, offers the opportunity to introduce the importance of wildlife to many residents of Harrow. The action plan will also provide many residents with opportunities to actively contribute to the conservation of wildlife locally as part of the Harrow BAP.

Gardening is an excellent form of exercise and in an urban situation provides an opportunity to experience nature, for example listening to birds singing. Experiencing nature is thought to have many positive effects on human health, being particularly beneficial to people suffering from mental health and stress related illnesses. A report by UK tool manufacturing giants Spear and Jackson has revealed that most gardeners are healthier, happier and suffer less from stress than those without green fingers.

This action plan will consider both private and public gardens. A private garden is an area of land adjoining a private dwelling managed and enjoyed solely by the household. A public garden includes communal spaces of housing estates, community gardens and gardens found within park settings. Although the users may not manage these garden areas, they will still be in a position to influence the management and appearance of them. Whilst using these areas they will be able to experience nature, which is important for residents who do not have access to a private garden.

Allotments are also included within this action plan. Although allotments are primarily used for the production of fruit and vegetables, many of the principles of wildlife friendly gardening can be applied to the management of allotments. As one of the top ten physical activities people engage in, allotments have a positive health impact as well as a positive impact on the environment of the borough.

In recognition of the important role which allotment have providing a habitat for wildlife in urban areas of Harrow. Plus providing opportunities for local enterprise, such as horticulture work skills, provide educational resources within the community, promote environmental awareness and also have a therapeutic potential for people with mental and physical disabilities. A Harrow Allotment Strategy has been developed. The overall objective of this strategy is to increase the ability and opportunity for people to cultivate allotment plots in Harrow. The strategy seeks through its targets and initiatives to optimise the use of allotment sites for existing and potential plot holders, identify needs and meet demand

The strategy has 5 main aims:

- 1) Provide enough allotments -
- 2) Prioritise allotment use
- 3) Good administration
- 4) Environmental sustainability -
- 5) Provide enough resource

The strategy sets a number of actions, which will be delivered to achieve these aims, a number of which interlink with this action plan. Therefore the delivery of some actions within the allotment strategy will assist in implementing this action plan and vice versa.

3. Current Status

No information is available detailing the total area of gardens across Harrow. However from studying aerial photography the majority of the borough appears to have green areas within residential areas, indicating that many properties have gardens. It is in the north of the borough where these green areas are the largest, indicating that properties in the north of the borough tend to have larger gardens.

It is probable that in the less developed areas of the borough, particularly within the Green Belt, that garden hedgerows may be either ancient or species rich hedgerow, or adjoin these types of hedgerow. Ancient hedgerows are classed as those which were in existence before the Enclosure Acts were passed in England between 1720 and 1840. These hedgerows tend to support a greater diversity of plants and animals. Species rich hedgerows are those hedgerows which contain 5 or more native woody species on average in a 30 metre length. Because these types of hedges contain a variety of plant species they are considered to be of greater importance to wildlife than those hedgerows comprised of only one or two plants.

The council has some 1400 plots. The take up is currently 77% but varies hugely between different sites. Some are full; others are very under-utilised, with a particular drop in take-up to the east of the borough. There are 6 allotment sites which form part of a larger SINC.

4. Specific Factors Affecting the Habitat

These are factors affecting the habitat currently either national, specifically in Harrow or both.

▪ Management

Appropriate management is crucial if a garden is to support wildlife. Often gardeners seek to have a tidy garden or allotment resulting in a negative effect on wildlife. For example pruning plants at the wrong time of year can disturb nesting birds and can deplete food sources such as berries and seed heads. The choice of plants used in a garden can greatly influence the available nectar source for wildlife, for example some plants with double flowers are devoid of nectar. Many non-native plants may offer the same value to wildlife as many native plants.

▪ Pesticide and herbicide use

Despite growing public awareness about the effects of chemicals on wildlife, there is still a demand from gardeners for chemicals to be available to use in controlling common garden pests and weeds. Many gardeners may be unaware of alternative environmental friendly control methods for example encouraging natural predators, and of the harm chemicals can have on the wider environment.

▪ **Development pressure**

There is an ever increasing need for housing provision within urban areas and as a result gardens are often perceived to provide suitable land for development. This combined with many new housing developments incorporating smaller sized gardens has resulted in a loss of garden space from many residential areas.

Demand for off road parking has led to many front gardens being lost to car parking provision. As a result many front gardens are now devoid of all vegetation. Not only can this have a negative impact on the visual appearance of the street scene, but also causes a loss of habitat for wildlife and increases flooding risk.

▪ **Wildlife corridors**

Gardens and allotments can act as wildlife corridors, providing shelter which enables wildlife to move freely from one area to another. The value of these areas to act as wildlife corridors increases if the garden or allotment adjoins another habitat or if a line of gardens share a continuous habitat for example a hawthorn hedge. However if a line of gardens is fragmented, either by a garden being lost to development or designed to have no vegetation, the gardens can no longer collectively act as a wildlife corridor.

▪ **Use of unsustainable materials**

Unsustainable materials for example certain woods, stone and peat continue to be used in gardens. Awareness amongst gardeners needs to be increased to highlight the negative impact that using unsustainable materials has on the environment. For instance using timber products which are Forestry Stewardship Council certified ensures that the timber comes from sustainable woodlands and can help alleviate this problem.

▪ **Climate change**

Increased temperatures and changes in rainfall patterns are expected in the future as part of climate change. This will undoubtedly have an effect on the plant and animal life our climate will support. In the future gardeners may need to use plants that can tolerate our changing climate, for example drought tolerant plants. This will also affect the timing of harvesting of crops and the choice of vegetables and fruits available for gardeners to grow.

▪ **Water usage**

Large amounts of water can be used, in a belief that regular watering is needed to achieve a green and productive garden or allotment. Gardeners need to be encouraged to collect rainwater more effectively and also be made aware of the principles of effective watering.

▪ **Illegal disposal of garden waste**

Some gardeners, instead of disposing of their garden or allotment waste

legally choose to dump their waste illegally. This problem is evident where gardens adjoin open spaces or allotments and the waste can easily be dumped the other side of the fence. This is not only unsightly but can also create problems of soil enrichment and invasion by horticultural plant species. Hopefully the introduction of free and regular garden waste collections by the council will minimise these problems.

5. Current Action

5.1 Legal Status

There is no direct legal protection for gardens or allotments. However gardens and allotments may support species protected by the Wildlife and Countryside Act 1981 and The Conservation (Natural Habitats, &c.) Regulations 1994. For example nesting birds or reptiles such as grass snakes.

The Hedgerow Regulation Act 1997 aims to protect hedgerows as a countryside characteristic. The regulations prohibit the removal of most countryside hedgerows without first submitting a hedgerow removal notice to the council. However the regulations exclude hedgerows within or marking the boundary of a residential dwelling.

Trees within gardens can be protected through Tree Preservation Orders or Conservation Area designations, meaning that consent from the Council is required before any work to the tree can be performed.

The duty to have regard to biodiversity conservation under Section 40 of the Natural Environment and Rural Communities Act 2006 will facilitate consideration of the role that gardens and allotments play in conservation whenever relevant functions are exercised, for instance policy making or planning decisions.

5.2 Mechanisms targeting the habitat

The following management and restoration actions are ongoing. They need to be supported and continued in addition to the action listed under Section 7.

- **Allotment strategy**

The forthcoming strategy will obviously impact upon to work of this action plan, it may be necessary to review this action plan prior to 2013, to enable actions from this strategy to be incorporated into the work of this action plan.

- **London Wildlife Trust's wildlife surveys**

Annually the London Wildlife Trust invites members of the public to send them records of the wildlife they see in their gardens. They also perform a stag beetle survey. Harrow Council has access to the data collected as part of these surveys through our partnership with GIGL Information for Greater London.

▪ **Surveying of residents gardens**

A handful of residents currently record the wildlife that they observe in their garden. Although this work is not part of a formal survey, the residents known to the council are now sending their records to GIGL.

▪ **Earth Project**

The Earth Project has recently established adjacent to the Newton Park East Allotments, it is part of the Harrow Skill Centre offering courses in horticulture. It plans to expand offering courses to the wider community about gardening and the benefits of wildlife friendly gardening. Establishing the Earth Project was a culmination of involvement from various local organisations and the Council.

▪ **Harrow in Leaf**

Harrow in Leaf is a registered charity that acts as an umbrella organisation for allotment and horticultural groups in Harrow and whose aim is to promote horticulture in the Borough. Members include representatives of many Harrow allotment sites, horticultural associations, park users and local beekeepers as well as individuals interested in gardening.

▪ **Harrow Unitary Development Plan**

There are two specific policies within the Harrow Unitary Development Plan 2004 which seek to protect the street scene and also allotments from the pressure of development.

D9 Streetside Greenness and Forecourt Greenery

The Council will seek to achieve and retain a high quality of streetside greenness and forecourt greenery in the borough.

EP49 Allotments

The council will endeavour to retain allotment sites in their current use. On sites identified as surplus to requirements preference will be given to another open space use. Built development, on part or all of a site, will only be permitted where:-

- a) There is no deficiency in public open space or demand for recreational facilities that could be remedied by allocating the site for that purpose;
- b) Consideration has been given to an alternative open space use and none is found to be suitable for the site; and
- c) The site makes no significant contribution to the environmental character of the area.

6. Flagship Species

These special plants and animals are characteristic of gardens and allotments in Harrow



Hedgehog

The hedgehog is known as 'the gardener's friend' as it will eat slugs.



Bumble bees

Are valuable in a garden for pollinating flowers.



Honeysuckle

Provides a source of nectar for insects.



Lavender

Provides a source of nectar for insects.

7. Targets and Actions

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.

Please note that the partners identified in the tables are those that have been identified 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.

Policy & Strategy

Target 1 Minimise the impact of developments upon gardens by incorporating relevant policies into the emerging Harrow Local Development Framework Core Strategy by 2010

Action	Target Date	Lead	Other Partners
1. Work with the LDF team, to inform policy development to ensure that developments do not contribute to the loss of gardens	2008 - 2010	LBH	Pinner Association, Hatch End Association, Harrow Heritage Trust
2. Produce a leaflet explaining best practice principles of developments involving gardens	2009	LBH	

Target 2 To incorporate wildlife friendly planting into municipal planting areas managed by the council by 2013

Action	Target Date	Lead	Other Partners
1. Assess what plants are currently used in municipal planting areas	2008	LBH	Pinner Association
2. Develop a list of plants that benefit wildlife and can be sourced through existing plant suppliers.	2008	LBH	
3. Incorporate wildlife friendly planting into municipal planting schemes	2009-2013	LBH	

Habitat Management & Creation

Target 1 Developing a demonstration allotment, using wildlife friendly gardening techniques, to encourage residents and schools to garden in a wildlife friendly manner by 2008

Action	Target Date	Lead	Other Partners
1. Maintain and develop demonstration allotment at the Earth Project	2008	Earth Project	LBH
2. Seek sponsorship from local garden centre to support demonstration allotment	2008-2013	LBH	
3. Use the demonstration allotment for evening classes and workshops	2008-2013	Earth Project	
4. Assist one or more schools annually to develop a wildlife garden	2008-2013	LBH	HA21 Education Group

Target 2 Through the 'Estates in Bloom' project incorporate wildlife friendly planting into the communal garden areas within council managed housing estates by 2013

Action	Target Date	Lead	Other Partners
1. Assess plants currently used in project	2008	LBH	Residents
2. Explain to residents the advantages and disadvantages of certain plants for wildlife	2008-2013	LBH	Residents
3. Incorporate wildlife friendly plants into the overall planting scheme	2008-2013	LBH	Residents

Target 3 Encourage residents and garden designers to use in their gardens plants and features which benefit or encourage wildlife by 2013

Action	Target Date	Lead	Other Partners
1. Circulate the Natural England 'Plants for wildlife' leaflet	2008-2013	LBH	
2. Develop links with local garden centres to negotiate a promotion to encourage local residents to purchase plants of benefit to wildlife and circulate relevant leaflets	2008-2013	LBH	
3. Encourage the use of bee hotels, nesting boxes and bug hotels in gardens and allotments	2008-2013	LBH	

Advisory

Target 1 Increase knowledge amongst Harrow residents and schools about the benefits of wildlife friendly gardening by distributing a suite of leaflets covering wildlife gardening topics by 2013

Action	Target Date	Lead	Other Partners
1. Develop a list of wildlife garden topics which require leaflets	2008	LBH	Harrow in Leaf
2. Investigate what current leaflets are available from other sources which focus on the topics identified in the previous action	2008	LBH	Harrow in Leaf
3. Distribute leaflets	2008-2013	LBH	
4. Seek funding to produce leaflets where there is a gap in current provisions	2008/9	LBH	
5. Develop and distribute leaflets as and when produced	2008-2013	LBH	Harrow in Leaf
6. Produce a guidance pack specifically for schools, about managing areas for wildlife and how to incorporate wildlife into national curriculum teaching	2010	LBH	Harrow in Leaf HA21 Education Group

Research and Monitoring

Target 1 To involve residents in Harrow in the monitoring of wildlife in gardens and allotments by performing an annual wildlife survey

Action	Target Date	Lead	Other Partners
1. Assess data provided by GIGL and develop a list of species which require annual surveying	2008	LBH	
2. Perform a garden and allotment wildlife survey to be undertaken by residents and allotment holders annually	2008-2013	LBH	Harrow in Leaf
3. Submit data to GIGL	2008-2013	LBH	Harrow in Leaf, GIGL
4. Review data collected annually, to identify gaps in data and population changes	2008-2013	LBH	

Raising Awareness

Target 1 Promote greater awareness of the value of gardens for wildlife by 2013

Action	Target Date	Lead	Other Partners
1. Have a stall promoting wildlife gardening at local garden events	2008-2013	LBH	
2. Incorporate gardening activities into holiday play schemes for children	2008-2013	LBH	
3. Develop a web based gardeners forum	2010	LBH	Harrow in Leaf

Target 2 Increase the occupancy of allotments by 10% by 2013

Action	Target Date	Lead	Other Partners
1. Compile a database of occupied and vacant allotments and update annually	2008-2013	LBH	Harrow in Leaf
2. Produce a leaflet aimed at potential allotment holders	2008	LBH	Harrow in Leaf
3. Develop a dedicated webpage on the Harrow Council website	2008	LBH	Harrow in Leaf
4. Produce an information pack for new allotment holders	2009	LBH	Harrow in Leaf
5. Offer new allotment holders support	2008-2013	Harrow in Leaf	

Target 3 Increase awareness of the wildlife value of bees by developing a facility for Harrow Bee Keepers to offer school visits by 2011

Action	Target Date	Lead	Other Partners
1. Assess the suitability of sites across the borough to provide a education facility	2009	LBH	HBKA, HA21 Education Group
2. Develop a project and funding plan	2010	HBKA	HA21 Education Group, LBH
3. Obtain external funding if necessary	2010	HBKA	HA21 Education Group, LBH
4. Implement the project plan	2011	HBKA	HA21 Education Group, LBH
5. Develop a suite of activities which fit within the national curriculum	2011	HBKA	HA21 Education Group
6. Hold an open evening for school teachers to visit facility	2011	HBKA	HA21 Education Group
7. Promote facility to local schools	2011-2013	HBKA	HA21 Education Harrow

8. Other Relevant Action Plans

Harrow Biodiversity Action Plan

- Grassland Habitat Action Plan
- Pond, Rivers and Streams Habitat Action Plan

London Biodiversity Action Plans

- Private Gardens Habitat Action Plan

Contact Details

Biodiversity Action Plan Officer
 Harrow Council, Community & Environment,
 3rd Floor,
 P.O. Box 37,
 Civic Centre,
 Harrow
 HA1 2UY

Tel 020 8736 6080

Email: ldf@harrow.gov.uk

Abbreviations

GIGL - Greenspace Information for Greater London

HA 21 Education Group - Harrow Agenda 21 Education Group

HBKA - Harrow Beekeepers Association

LBH - London Borough of Harrow



Credit Steve Bolsover

1. Aims

- To increase awareness and knowledge about the importance of grassland sites found within Harrow
- To ensure that all grassland Sites of Importance for Nature Conservation are managed appropriately
- To participate in projects linked to the London Acid Grassland Working Group

2. Introduction

This action plan will consider all types of grassland, with the exception of amenity grassland, which will be covered under the Parks Habitat Action Plan.

There are some very important grassland sites within Harrow, the most significant is Bentley Priory Open Space, which is designated as a Site of Special Scientific Interest. This designation means that the site is considered to be one of the country's finest examples of unimproved

neutral grassland habitat. The meadows found on Bentley Priory Open Space are some of the largest found within London. Grassland sites, in general support a variety of wildlife including invertebrates, ground nesting birds and mammals. Plants found in grassland are not restricted to just grass species, many sites also support an array of wildflowers.

Grassland is a sensitive habitat requiring ongoing management. If left unmanaged all grassland habitats will naturally develop into scrubby vegetation before eventually becoming woodland, this process is referred to as ecological succession. Sometimes a site or area maybe left unmanaged to favour succession. However, important grassland sites or sites used for recreation will be actively managed to control scrub growth and maximise the grassland cover.

Many grassland sites have either permanently or temporarily been used for agricultural production. During the Second World War the 'Dig for Victory' campaign saw many grassland sites used for food production, common land was frequently used. Farmers continued to be encouraged to increase food production after the war, although eventually food production exceeded the demand for food. Arable farmers were then instructed as part of reforms in 1992 to the Common Agricultural Policy to take part of their land out of agricultural production. This unproductive land was termed as 'set-aside' and was either permanently or temporarily used as grassland.

The grassland of set-aside areas are unlikely to resemble natural grassland, because agricultural production dramatically alters the composition of the soil. Also set-aside is likely to have been reinstated by seeding with rye grass rather than a mixture of grasses. Despite this it has been found that set-aside can provide a valuable refuge for wildlife in agricultural dominated landscapes. Recently it has been announced that farmers will no longer need to have a proportion of their farm in set-aside. The effects that this will have on wildlife are currently unknown.

Several grassland types are found within Harrow. Grassland types are defined according to the soil pH which the grassland has developed on. The pH of the soil is directly related to the underlying rock type and will determine whether the grassland is classed as being acidic, neutral or calcareous. The table below shows the pH ranges of soils and the grassland types they each relate to.

Grassland Type	pH range
Acid	< 5
Neutral	5 – 6.5
Calcareous	> 6.5

Within Harrow there are no areas of calcareous grassland.

Acid grassland is usually found in areas where there is an acidic bedrock or deposits of sand and gravels. Characteristically these soils are low in nutrients and free draining. Plants found in these soils are termed as being 'calcifuge' or lime-avoiding plants. Only a selection of plants can tolerate growing in these harsh conditions, including: tormentil, heath bedstraw, common bent and purple moor grass which are associated with acidic soil. It is the presence or absence of species such as these, which site managers use to determine whether or not the grassland is acid grassland.

Neutral grassland is found in areas where the underlying bedrock is neither acidic nor alkaline. There are no strict indicator plant species for this type of grassland. Site managers identify this grassland type based upon the absence of strong calcicole, lime loving plants and calcifuge, lime hating plants.

Neutral grassland are often referred to as being either unimproved or improved grassland. Unimproved neutral grassland is usually managed in a traditional manner for example as a hay meadow or pasture. The term unimproved means that chemical or natural fertilisers have not been used to increase the nutrient levels in the soil. This restricts plant growth and means that competitive fast growing grassland species are less dominant allowing a wider variety of plant species to thrive. Due to this unimproved grassland is often termed as being species-rich grassland by conservationist and land managers. Management seeks to ensure continued low nutrient levels.

In contrast improved grassland is intensively managed, involving the use of fertilisers and acid soils may be limed to raise the pH. Improved grassland is typically used for amenity grassland or grazing and silage production as part of a current or past farming rotation system. Due to the high nutrient levels the grassland is often dominated by a few fast growing plants which thrive in high nutrient conditions, out competing other slower growing plants. Because of this improved grassland is often referred to as being species poor grassland. Usually grassland dominated by rye grass or clover is indicative of improved grassland. After the use of fertilisers has ceased, the grassland will still be considered as improved due to the semi permanent effect of the fertilisers on the soil.

3. Current Status

The Greater London Authority performed a habitat survey of Harrow in 2003. This survey provides the following data relating to grassland types found within the borough. Details of amenity grassland sites have been omitted from this table, as they will be dealt with under the Parks Habitat Action Plan.

Biodiversity Action Plan

Grassland Habitat Action Plan

Grassland type	Area (hectare)	Site name
Acid grassland	0.22	All-Saint's Churchyard
Acid grassland	12.6	Bentley Priory
Acid grassland	1.2	Bentley Priory RAF
Acid grassland	0.63	Byron Park
Acid grassland	0.05	Canons Park
Acid grassland	4.61	Copse Farm
Acid grassland	0.39	Eastcote Lane Cemetery
Acid grassland	12.12	Harrow Weald Common
Acid grassland	0.44	Little Heathfield
Acid grassland	0.47	Newton Farm Ecology Park
Acid grassland	0.12	Newton Park West
Acid grassland	4.71	Pinner Hill Golf Course
Acid grassland	3.45	Roxbourne Rough Nature Reserve
Acid grassland	3.72	Royal Orthopaedic Hospital
Acid grassland	4.82	Stanmore Common
Acid grassland	2.82	Stanmore Country Park
Acid grassland	0.17	Stanmore Little Common
Acid grassland	2.57	Sudbury Hill
Acid grassland	0.61	The Grail Centre
Acid grassland	0.28	West Harrow Recreation Ground
Acid grassland	0.14	Woodland Hall Nursing Home
Improved or re-seeded agricultural grassland	19.68	Beeton Close Estate
Improved or re-seeded agricultural grassland	0.97	Copse Farm
Improved or re-seeded agricultural grassland	16.6	Grove Farm
Improved or re-seeded agricultural grassland	8.76	Harrow Weald Common
Improved or re-seeded agricultural grassland	16.63	Harrow-on-the-Hill
Improved or re-seeded agricultural grassland	37.82	Pinnerwood Farm
Improved or re-seeded agricultural grassland	12.62	Royal Orthopaedic Hospital
Improved or re-seeded agricultural grassland	0.4	Stanmore Marsh
Improved or re-seeded agricultural grassland	0.32	The Grail Centre
Neutral grassland (herb-rich)	6.45	Bentley Priory
Neutral grassland (herb-rich)	0.9	Canons Park
Neutral grassland (herb-rich)	1.48	Harrow Weald Cemetery
Neutral grassland (herb-rich)	3.16	Jubilee Line
Neutral grassland (herb-rich)	0.26	Kenmore Road
Neutral grassland (herb-rich)	0.11	Kenton Sports Club
Neutral grassland (herb-rich)	1.07	M1 Embankments
Neutral grassland (herb-rich)	0.53	Orchard Grove Allotments
Neutral grassland (herb-rich)	0.29	Paines Lane Cemetery
Neutral grassland (herb-rich)	0.36	Pinner Green
Neutral grassland (herb-rich)	0.52	Roch Avenue Allotments
Neutral grassland (herb-rich)	5.61	Royal Orthopaedic Hospital
Neutral grassland (herb-rich)	0.47	St. John the Evangelist
Neutral grassland (herb-rich)	0.05	Stanmore Common
Neutral grassland (herb-rich)	3.24	Stanmore Country Park
Neutral grassland (herb-rich)	0.1	The Rattler
Neutral grassland (herb-rich)	2.02	The Squirrels
Neutral grassland (herb-rich)	0.64	Watling Street
Neutral grassland (semi-improved)	0.75	Alexandra Park
Neutral grassland (semi-improved)	0.12	All Saints Churchyard Extension
Neutral grassland (semi-improved)	0.44	Beeton Close Estate
Neutral grassland (semi-improved)	11.36	Bentley Priory
Neutral grassland (semi-improved)	0.16	Bishops Ken Allotment Site
Neutral grassland (semi-improved)	0.82	Byron Park
Neutral grassland (semi-improved)	7.01	Canons Park
Neutral grassland (semi-improved)	0.21	Chandos Recreation Ground

Biodiversity Action Plan

Grassland Habitat Action Plan

Grassland type	Area (hectare)	Site name
Neutral grassland (semi-improved)	0.14	Churchfield Close Sports Ground
Neutral grassland (semi-improved)	0.4	Fenced triangle of grassland
Neutral grassland (semi-improved)	8.74	Grove Farm
Neutral grassland (semi-improved)	0.14	Harrow Town Sports Club
Neutral grassland (semi-improved)	13.64	Harrow Weald Common
Neutral grassland (semi-improved)	0.05	Harrow-on-the-Hill
Neutral grassland (semi-improved)	3.39	Harrow-on-the-Hill
Neutral grassland (semi-improved)	0.34	Hatch End Arts Centre
Neutral grassland (semi-improved)	0.02	Kinsley Rd Verge
Neutral grassland (semi-improved)	0.09	Little Heathfield
Neutral grassland (semi-improved)	9.17	Lower Priory Farm
Neutral grassland (semi-improved)	1.85	M1 Embankments
Neutral grassland (semi-improved)	0.03	Marsh Lane green verges
Neutral grassland (semi-improved)	0.62	Newton Farm Ecology Park
Neutral grassland (semi-improved)	0.08	Newton Park West
Neutral grassland (semi-improved)	0.95	Orley Farm School
Neutral grassland (semi-improved)	0.2	Paines Lane Cemetery
Neutral grassland (semi-improved)	0.13	Pinner Green
Neutral grassland (semi-improved)	0.38	Pinner Village Allotments
Neutral grassland (semi-improved)	0.91	Railtrack lineside
Neutral grassland (semi-improved)	0.62	Railtrack lineside
Neutral grassland (semi-improved)	0.25	Rayner's Lane Railside Land
Neutral grassland (semi-improved)	0.14	River Pinn
Neutral grassland (semi-improved)	0.09	River Pinn at West Harrow
Neutral grassland (semi-improved)	0.16	Roxbourne Park
Neutral grassland (semi-improved)	1.43	Roxeth Park
Neutral grassland (semi-improved)	0.64	Royal Orthopaedic Hospital
Neutral grassland (semi-improved)	0.55	Shaw Trust Nursery
Neutral grassland (semi-improved)	0.23	St. John the Evangelist
Neutral grassland (semi-improved)	1	Stanmore Common
Neutral grassland (semi-improved)	6.34	Stanmore Country Park
Neutral grassland (semi-improved)	0.37	Stanmore Little Common
Neutral grassland (semi-improved)	0.4	Stanmore Marsh
Neutral grassland (semi-improved)	0.34	TA Centre
Neutral grassland (semi-improved)	0.05	Tescos car park
Neutral grassland (semi-improved)	0.24	The Rattler
Neutral grassland (semi-improved)	0.14	Trackside
Neutral grassland (semi-improved)	0.39	Vernon Drive Allotments
Neutral grassland (semi-improved)	0.31	West Harrow Recreation Ground
Neutral grassland (semi-improved)	0.04	Whitefriars Open Space
Neutral grassland (semi-improved)	0.07	Woodlands Open Space
Neutral grassland (semi-improved)	0.11	Yeading Brook Riverside Walk
Neutral grassland (semi-improved)	0.22	Yeading Walk

Grassland type	Area (hectare)	Site name
Tall herbs	0.18	Bentley Day Centre grounds
Tall herbs	1.55	Bentley Priory
Tall herbs	0.65	Canons Park
Tall herbs	0.3	Chandos Recreation Ground
Tall herbs	0.15	Dalkeith Grove
Tall herbs	0.06	Edgware Football Ground
Tall herbs	0.04	Grounds to Roxbourne Health Centre
Tall herbs	1.23	Grove Farm
Tall herbs	0.33	Harrow Weald Common
Tall herbs	0.36	Harrow-on-the-Hill
Tall herbs	0.15	Hatch End Arts Centre
Tall herbs	2.13	Jubilee Line
Tall herbs	0.06	Kenton Sports Club
Tall herbs	0.43	Little Heathfield
Tall herbs	0.03	Marsh Lane green verges
Tall herbs	0.02	Metropolitan Line-side
Tall herbs	0.2	Newton Park West
Tall herbs	0.02	Pinner Memorial Park
Tall herbs	2.08	Railtrack lineside
Tall herbs	0.25	Rayner's Lane Railside Land
Tall herbs	0.11	Rayners Lane Trackside SINC
Tall herbs	0.07	Roch Avenue Allotments
Tall herbs	0.03	Roxbourne tributary at Jasmine Gardens
Tall herbs	2.44	Roxeth Park
Tall herbs	2.75	Royal Orthopaedic Hospital
Tall herbs	0.33	Shaw Trust Nursery
Tall herbs	0.03	Stag Lane School
Tall herbs	1.18	Stanmore Country Park
Tall herbs	6.22	Stanmore Country Park
Tall herbs	0.03	Stanmore Little Common
Tall herbs	0.2	Stanmore Park
Tall herbs	0.02	TA Centre
Tall herbs	0.07	The Grail Centre
Tall herbs	0.41	The Rattler
Tall herbs	0.16	Watling Street

4. Specific Factors Affecting the Habitat

These are factors affecting the habitat currently either national, specifically in Harrow or both.

▪ Management

Grassland is a sensitive habitat which, if left unmanaged, will develop into scrub eventually turning into secondary woodland. It is essential that sensitive grassland sites are carefully managed to prevent ecological succession and that the grassland is cut after wildflowers and grasses have dispersed their seeds. If cut too early, the seed bank will be depleted the following year. However a mixture of scrub and grassland can be of value to wildlife, however this still requires management to prevent total coverage by scrub.

▪ Soil Enrichment

Many wildflower plants thrive in nutrient poor soils, however soils can easily become enriched with nutrients. If the arisings are not removed when the grass is cut they act as a green manure enriching the soil.

If the grassland is currently or has been in the past used for agricultural purposes it is likely that the grassland will have been enriched, by spreading chemical fertiliser, manure or by sowing clover. It may take many years for the nutrient levels to fall again to levels that favour a diversity of wild flowers.

Atmospheric pollution, mainly vehicle exhaust fumes, is also thought to enrich soils causing habitats to degrade.

Dog fouling, both by urine and faeces is another significant source of enrichment.

▪ **Use of herbicides**

Herbicides continue to be used on many grassland sites, especially areas used for recreation for example bowling greens and golf courses. These grassland areas require a fine turf free of weeds.

In some cases it is necessary to control certain weed species under the Weeds Act 1959 and the Ragwort Control Act 2003, herbicides maybe used to control weeds under this legislation.

▪ **Public Perception**

Many members of the public think that grassland, especially within urban areas should be kept short by regular mowing. If grass is left unmown this can be perceived to be a sign of neglect rather than wildlife friendly management.

▪ **Decline in grazing**

The traditional method of managing many grassland sites is by grazing, which causes the grass to be cut in a non-uniform manner. However changes in agriculture have meant that many farmers have stopped livestock farming, causing a shortage of graziers. Many grassland sites are either no longer grazed or are being grazed by modern agricultural breeds of cattle, sheep or horses. Modern breeds tend to prefer grazing on lush grass and avoid scrubby growth it is often the scrubby growth which need to be controlled to protect the delicate grassland plants.

Within London finding a suitable grazier can be difficult. Not only are there few farmers within London, but those who do graze livestock prefer large areas free from people and dogs. These sites are rare within London as many of the larger grassland sites are open to the public.

Rabbit grazing in some instances can be beneficial to sites, controlling vigorous plant growth and preventing development into scrub. However there are instances where rabbit populations become too large and the site becomes overgrazed. Controlling rabbit populations can be difficult on sites open to the public.

- **Management Costs**

Amenity grassland requires regular cutting compared to grassland managed for nature conservation which requires an annual cut usually in mid to late summer. This is perceived to be a cheaper option. However many councils have found that the mowing regime required for managing grassland for nature conservation does not provide a financial saving. This is because of the following factors

- New machinery capable of cutting long grass and collecting the arisings is needed. Often council machinery is designed to cut short grass without collecting the arisings.
- Staff training is needed to use the new machinery and understand the concept behind this method of mowing.
- Disposal of the cut grass can incur a cost. It is unlikely that the cut grass can be sold for hay due to contamination by dog faeces and litter.
- Litter in areas of longer grass takes longer to collect because it becomes entangled in the long grass thus increasing costs.

- **Climate change**

It is thought that the effects of climate change will result in hotter drier summer, warmer wetter winters and more frequent flash flooding. Hotter and drier summers will increase the risk of grasslands becoming parched or damaged by fire.

Currently it is not known what the effects of climate change will be on wildlife. However it is expected that variations in weather patterns will have an effect on many species. For example populations of those species, which cannot tolerate high temperatures, are likely to decrease. Whilst species previously associated with warmer countries may start to appear in the UK. It is possible that seasonal patterns may also alter, which is likely to have an effect on the success of many breeding species.

- **Human or domestic animal disturbance**

Ground flora and fauna within grassland and can easily be disturbed by the presence of humans and domestic animals. The results of trampling by people can also have devastating effects on grassland, especially those which contain delicate ground flora and slow moving fauna.

Dogs and cats are known to attack and cause disturbance to ground nesting birds. If nesting birds are disturbed they may leave their eggs or broods, causing them to cool down and possibly be attacked by predators.

- **Public access/recreation pressure**

Many grassland sites are open to the public to use either for informal recreation, for example walking or for formal recreation activities such as golf or bowling.

The popularity of a site can cause damage to the site, for example excessive use of footpaths can cause erosion or compaction of soils. This can reduce the number of plants found in the area.

▪ **Vandalism**

The main form of vandalism affect grassland sites is that of fire. This is of particular concern during the summer months as grass, when dry is highly flammable causing fire to quickly spread.

▪ **Fragmentation**

The wildlife value of all habitats is increased if the area adjoins other habitats, because wildlife is able to move from one area to another rather than being confined to one habitat. Many species require a range of habitats to complete their life cycles. However many areas of habitat have become fragmented and isolated from other areas of similar habitat, usually as a result of sites being lost to development.

▪ **Tree Planting Schemes**

Tree planting schemes may not consider the wildlife value of rough grassland and plant trees on areas of valuable grassland.

5. Current Action

5.1 Legal Status

Bentley Priory Open Space is designated as a Site of Special Scientific Interest, under section 28G of the Wildlife and Countryside Act 1981 (as amended) public bodies must 'take reasonable steps, consistent with the proper exercise of their functions, to further the conservation and enhancement of SSSIs'. In addition to this Harrow Council must not allow any activities, without prior consent from Natural England to take place on or adjacent to Bentley Priory Open Space which are considered by Natural England to negatively impact upon the features of interest of Bentley Priory Open Space.

Although the Wildlife and Countryside Act 1981 does not directly protect grassland as a habitat. It does offer protection to many plant and animal species found within grassland sites. The Act prohibits the unauthorised intentional uprooting of any wild plant, although it is not normally an offence to take fruit, foliage, fungi or flowers. Additional protection is given to plants listed on schedule 8 forbidding any picking, uprooting or destruction. The Wildlife and Countryside Act 1981 also gives protection to various animal species associated with grassland, for example reptiles, birds and some mammals.

Countryside and Rights of Way Act 2000 requires the Secretary of State to compile a list of habitats and species of principle importance for biodiversity. This includes low land acidic grassland and various plant

and animal species associated with grassland. The Natural Environment and Rural Communities Act 2006 introduced in October 2006 requires the Secretary of State to update this list.

Conservation (Natural Habitats, &c.) Regulations 1994 deals with the protection of European sites and European protected species. Within Harrow there are no European sites and European protected species are mainly confined to Bats and Great Crested Newts, it is possible for these species to be found in grassland.

Acid grassland is a UK priority habitat and therefore receives some protection, in respect to planning issues via Planning Policy Statement 9 Biodiversity and Geological Conservation.

In addition, the general duty under Section 40 of the Natural Environment and Rural Communities Act 2006 will ensure consideration of biodiversity conservation issues, including the importance grasslands, whenever the Council is exercising relevant functions.

5.2 Mechanisms targeting the habitat

The following management and restoration actions are ongoing. They need to be supported and continued in addition to the action listed under Section 7.

▪ Bentley Priory Open Space Site of Special Scientific Interest

This site is grazed annually currently by Belgium Blue cattle. It is essential for this site to be grazed, as this is the best form of management in order to maintain the current sward of grassland species. Areas of the priory have been fenced in order to concentrate the grazing on particular areas. The grazing forms part of a Countryside Stewardship Agreement with Natural England.

▪ Stanmore Common

The mowing regime of this site has been agreed with the Harrow Nature Conservation Wardens to maximise the wildlife potential of the grassland.

6. Flagship Species

These special plants and animals are characteristic of grassland in Harrow



Buttercup

Used by many children to determine whether or not one likes butter.

Credit Peter Wakely/Natural England



Grass snake

Often found in undisturbed areas of grassland basking in the sun.



Grasshopper

Easily noticed due to the noise they make by rubbing their hind legs against their forewings.

7. Targets and Actions

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.

Please note that the partners identified in the tables are those that have been identified 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.

Policy and Strategy

Target 1 Maximise the retention and creation of grassland on development sites by 2013

Action	Target Date	Lead	Other Partners
1. Adopt the ALGE planning checklist for use with planning applications	2008	LBH	
2. Incorporate green roofs into publicly visible structures	2011	LBH	
3. Advocate the use of green roofs to developers	Annual	LBH	Developers
4. Develop a suite of Harrow specific grassland seed and/or plant species mixtures of known provenance to be recommended to developers when creating or enhancing grassland on or near development sites	2008	LBH	HBKA

Habitat Management and Creation

Target 1 Achieve and maintain 'favourable condition' assessment by Natural England of Bentley Priory Site of Special Scientific Interest by 2013

Action	Target Date	Lead	Other Partners
1. Maintain the use of cattle to graze grassland areas	Annual	LBH	NE, BPNRMC, grazier
2. Investigate the practicalities of Introducing conservation grazing to control scrub growth	2009	LBH	NE, BPNRMC
3. If above action feasible develop and implement project plan and funding strategy	2013		
4. Secure a section 106 agreement from the development of RAF Bentley Priory	Upon receipt of outline planning permission	LBH	NE, BPNRMC , HNCF
5. Implement works detailed in section 106 agreement	Upon receipt of section 106 contribution	LBH	BPNRMC
6. Implement work required as part of current management programme	2008 2009	LBH	NE , BPNRMC
7. Review current management programme	2008	LBH	NE , BPNRMC
8. Investigate feasibility of transferring the current Defra Countryside Stewardship Agreement to a Higher Level Scheme Agreement	2008	LBH	NE
9. If above action found to be feasible develop Higher Level Scheme agreement	2008	LBH	NE , BPNRMC
10. Renew management programme	2009	LBH	NE , BPNRMC
11. Implement renewed management programme	2010 2011 2012 2013	LBH	NE , BPNRMC

Target 2 Work with owners and managers of grassland Sites of Importance for Nature Conservation to ensure that appropriate grassland management plans are being used by 2013

Action	Target Date	Lead	Other Partners
1. Develop a database of grassland SINC owners	2009	LBH	
2. Offer advice to 3 private owners per annum to review current management	2008 - 20013	LBH	
3. Support owners in implementing reviewed management	2008 - 20013	LBH	
4. Encourage owners of agriculture holders to develop Entry Level Scheme applications using grassland management options	2008 - 20013	LBH	
5. Review and update the management plans for 3 council managed grassland SINC's per annum	2008 - 20013	LBH	
6. Implement updated council management plans	2008 - 20013	LBH	

Target 3 Develop links with cemetery and churchyard managers, support to incorporate grassland conservation management techniques where practical by 2011

Action	Target Date	Lead	Other Partners
1. Develop links with London Churchyard Working Group	2008	LBH	LCWG
2. Develop a database of cemetery and churchyard managers	2008	LBH	
3. Visit all council managed cemeteries	2009	LBH	
4. Review existing management plans for council managed cemeteries	2011	LBH	
5. Where appropriate incorporate management work to improve grassland value	2011	LBH	
6. Contact other cemetery and churchyard managers offering advice regarding good grassland management	2008 - 20013	LBH	

Target 4 For all sites supporting acid grassland, maintain existing coverage and restore at least 0.5ha in partnership with the London Acid Grassland Habitat Action Plan by 2013

Action	Target Date	Lead	Other Partners
1. Identify sites supporting acid grassland	2009	LBH	LAGWG
2. Implement a management programme for the area of acid grassland and heathland restoration at Stanmore Common	2008 - 2013	LBH	HNCF
3. Circulate the Acid Grassland Conservation in London leaflet amongst managers and users of acid grassland sites	2009	LBH	
4. Work with the London Acid Grassland Working Group to develop a project and funding strategy to restore an area of 0.5 ha	2008 - 2013	LBH	LAGWG
5. Deliver restoration project	2008 - 2013	LBH	LAGWG

Target 5 Investigate the feasibility of conservation grazing grassland sites in Harrow by 2013

Action	Target Date	Lead	Other Partners
1. Identify source of funding and graziers	2009	LBH	
2. If previous action successful, produce a targeted and costed grazing strategy	2010	LBH	HNCF
3. Develop a funding strategy	2011	LBH	HNCF
4. Perform a series of public awareness/consultation events	2011	LBH	HNCF
5. Implement funding strategy	2012	LBH	HNCF
6. Introduce grazing	2012	LBH	HNCF
7. Monitor impact of grazing on grassland species populations	2012 - 2013	LBH	HNCF
8. Review grazing regime if deemed necessary	2012 - 2013	LBH	HNCF

Advisory

Target 1 Advise the managers of private recreation grassland sites and investigate incorporating wildlife friendly management techniques by 2013

Action	Target Date	Lead	Other Partners
1. Contact schools with playing fields and offer site managers a visit to discuss their current management and methods of incorporation good grassland management	2013	LBH	
2. Work with golf courses to incorporate wildlife friendly management into the course management	2008 - 2013	LBH	Golf clubs
3. Organise a guided walk around a golf course and invite other golf course managers	2010	LBH	Golf clubs

Research & Monitoring

Target 1 Encourage site managers and the public to record wildlife found in grassland sites by 2013

Action	Target Date	Lead	Other Partners
1. Identify existing or past locations of Yellow Meadow Ants hills	2008	LBH	Public, site managers
2. Encourage site managers and users to record the location of Yellow Meadow Ant hills	2008 - 2013	LBH	Public, site managers
3. Develop and circulate a grassland flora and fauna survey sheet to be used by non specialist recorders	2008	LBH	
4. Develop a survey sheet for schools to use to survey playing fields	2008	LBH	
5. Submit all records to GIGL	2008 - 2013	LBH	GIGL
6. Contact all known specialist recorder and ensure all records relating to grassland sites are submitted to GIGL	2008 - 2013	LBH	GIGL

Target 2 Develop a programme of instating and monitoring refugia to promote grass snakes as a flagship specie by 2010

Action	Target Date	Lead	Other Partners
1. Identify existing and potential reptile locations within the borough	2009	LBH	HNCF
2. Identify suitable sites to locate reptile refugia	2009	LBH	HNCF
3. Recruit and train volunteers to manage and inspect reptile refugia	2009 - 2013	LBH	HNCF
4. Submit records to GIGL	2009 - 2013	LBH	HNCF, GIGL

Raising Awareness

Target Increase public awareness of the value of grassland for wildlife by 2013

Action	Target Date	Lead	Other Partners
1. On sites important for ground nesting birds use temporary signage explaining the affects of disturbance	2008 - 2013	LBH	HNCF
2. Develop temporary signage to explain to users the purpose of implementing a new management regime	2008 - 2013	LBH	
3. Incorporate information about grassland management into site interpretation panels	2008 - 2013	LBH	
4. Circulate the acid grassland education pack developed by the London Acid Grassland Working Group	2008	LBH	HA21 Education Group

8. Other Relevant Action Plans

Harrow Biodiversity Action Plan

- Parks Habitat Action Plan
- Reptiles and amphibian Species Action Plan
- Bat Species Action Plan

London Biodiversity Action Plans

- Acid Grassland Habitat Action Plan
- Churchyards and Cemeteries
- Reptile Species Action Plan
- Bat Species Action Plan

Contact Details

Biodiversity Action Plan Officer
Harrow Council, Community & Environment,
3rd Floor,
P.O. Box 37,
Civic Centre,
Harrow
HA1 2UY
Tel 020 8736 6080
Email: ldf@harrow.gov.uk

Abbreviations

BPNRMC - Bentley Priory Nature Reserve Management Committee
GIGL - Greenspace Information for Greater London
HA 21 Education Group - Harrow Agenda 21 Education Group
HBKA - Harrow Beekeepers Association
HNCF - Harrow Nature Conservation Forum
LAGWG - London Acid Grassland Working Group
LBH - London Borough of Harrow
LCWG - London Churchyard Working Group
NE - Natural England



Credit Steve Bolsover

1. Aims

- To develop a programme that secures appropriate management and protection of heathland habitat
- To raise public awareness and appreciation of heathland habitats
- To continue the heathland restoration work at Stanmore Common and seek to restore heathland at Harrow Weald Common

2. Introduction

Heathland is distinctive habitat, often associated with bright purple heather interspersed with gorse. The grasses found on heathland sites are often similar to those associated with acid grassland. Like acid grassland, heathland develops on nutrient poor acidic soils. It is therefore common for heathland and acid grassland to be found on the same site.

Heathland was once a widespread habitat across London, but has recently declined. Heathland is a sensitive habitat, which requires careful management. If left unmanaged birch trees and bracken quickly start to dominate areas and shade more delicate heathland plants. Also their decomposing vegetation acts like compost and enriches the soil.

Heathland is often found on commons and would have thrived when the commoners actively managed the area. Their grazing animals would have kept the vegetation short and prevent trees from establishing. Fires were used as a management technique for controlling vegetation, with heather usually thriving after being exposed to fire. Eventually commoners stopped using the commons so intensively and as a result many commons eventually developed into secondary woodland as a result of the lack of management.

3. Current Status

Stanmore Common has a number of pockets of heather and gorse, however a number of other habitats, predominately secondary woodland are also found on the site. Despite this Stanmore Common is the only site in Harrow, which can be considered at least in part as heathland site. Harrow Weald Common was noted as supporting small areas of heathland in the survey of SINC's performed by the GLA in 2003. Many other sites in Harrow support species associated with heathland, however they are not of sufficient quality and quantity for the area to be considered as heathland.

4. Specific Factors Affecting the Habitat

These are factors affecting the habitat currently either national, specifically in Harrow or both.

▪ Succession

Heathland is a sensitive habitat, if left unmanaged the process of ecological succession will result in the heathland developing into scrub, which will eventually turn into secondary woodland. It is essential that heathland sites are carefully managed to prohibit ecological succession.

▪ Site management

Heathland areas require sensitive management. Grazing is often seen as the most appropriate technique as it creates a variety in the structure of the vegetation, rather than mechanical cutting which results in a uniform height of vegetation. However grazing animals are in limited supply in London.

Restoring heathland can involve dramatic and expensive work. It often involves removing trees and removing the topsoil. Users of the site may consider this to be an act of vandalism rather than necessary work to restore a precious habitat.

▪ Eutrophication

Because heathland species thrive in nutrient poor soil, they are sensitive to any enrichment in nutrients termed as eutrophication. Atmospheric pollution is considered to be the main cause of nutrient enrichment to heathland sites, mainly caused by car fumes.

▪ **Climate change**

Currently it is not known what the effects of climate change will be on wildlife. However it is expected that variations in weather patterns will have an effect on many species. For example populations of those species, which cannot tolerate high temperatures, are likely to decrease. Whilst species previously associated with warmer countries may start to appear in the UK. It is possible that seasonal patterns may also alter, which is likely to have an effect on the success of many breeding species.

▪ **Fire**

Although previously used as management technique, uncontrolled fires can cause a substantial damage to heathland plants and other wildlife. Smaller areas are particularly susceptible to the damage fire can cause.

5. Current Action

5.1 Legal Status

Although the Wildlife and Countryside Act 1981 does not directly protect heathland as a habitat, it does offer protection to many plant and animal species found within heathland sites. The Act prohibits the unauthorised intentional uprooting of any wild plant, although it is not normally an offence to take fruit, foliage, fungi or flowers. Additional protection is given to plants listed on schedule 8 forbidding any picking, uprooting or destruction. The Wildlife and Countryside Act 1981 also gives protection to various animal species associated with heathland, for example reptiles, birds and some mammals.

Heathland is a UK priority habitat and therefore receives some protection, in respect to planning issues via Planning Policy Statement 9 Biodiversity and Geological Conservation.

In addition, the general duty under Section 40, Natural Environment and Rural Communities Act 2006 should allow consideration of the need to protect heathland when the Council is exercising relevant functions which impact on biodiversity conservation..

5.2 Mechanisms targeting the habitat

The following management and restoration actions are ongoing. They need to be supported and continued in addition to the action listed under Section 7.

▪ **Restoration Work at Stanmore Common**

As part of a London wide project, aiming to restore heathland to key sites identified in the Heathland Recovery Strategy, restoration work has been performed at Stanmore Common. The work involved removing bracken from an area approximately 0.2 ha. The top soil and standing dead trees were then removed from the area. The area has been seeded with heather, the establishment of heather is expected to take a number of

years. In other areas of the common, where heather is found, work has been successful in increasing the size of the existing heather patches.

▪ Harrow Nature Conservation Forum Wardens

Two voluntary wardens oversee the management of Stanmore Common. They advise the council when management work is performed and also organise voluntary conservation work, using the British Trust for Conservation Volunteers.

6. Flagship Species

These special plants and animals are characteristic of heathland in Harrow



Heather

This low growing scrub is covered in masses of tiny purple flowers in the late summer.



Gorse

This prickly plant has bright yellow flowers, which have a unique smell similar to coconuts.



Bumblebees

Many more unusual species of bumblebees are found on heathland sites.



Solitary Wasps

Will burrow within the bare earth between plants or at the edges of paths. Unlike other wasps this group does not create hives or nests.

7. Targets and Actions

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.

Please note that the partners identified in the tables are those that have been identified 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.

Habitat Management and Creation

Target 1 To develop and deliver a long term management programme that ensures the long term favourable management of the heathland areas by 2013

Action	Target Date	Lead	Other Partners
1. Review existing management programme for Stanmore Common.	2008	LBH	HNCF
2. Devise a new management plan for Stanmore Common, which clearly defines areas of management work and the responsibilities of LBH and HNCF.	2009	LBH	HNCF
3. Deliver management plan	2009 - 2013	LBH	HNCF

Target 2 Investigate the feasibility of restoring heathland at Harrow Weald Common by 2009

Action	Target Date	Lead	Other Partners
1. Investigate what remnants of heathland vegetation exist on Harrow Weald Common, using data from GiGL and vegetation surveys.	2008	LBH	
2. Produce a brief report discussing the findings of above action. Report will also consider the financial implications of restoration work and also the physical feasibility of the work being successful	2008	LBH, HWCC	
3. If deemed appropriate incorporate restoration work into the site management programme	2008	LBH	

Target 3 Investigate the feasibility of conservation grazing Stanmore Common by 2013

Action	Target Date	Lead	Other Partners
1. Hold a public meeting to discuss the issues surround grazing to gauge residents opinions	2010	LBH	HNCF
2. Identify source of funding and graziers and produce a targeted and costed grazing strategy, which shall include a funding strategy	2010	LBH	HNCF
3. Introduce grazing	2012	LBH	HNCF
4. Review grazing regime if deemed necessary	2012 - 2013	LBH	HNCF

Advisory

Target 1 To continue to attend the London Heathland Habitat Action Plan Group and disseminate best practice to those involved in the management of heathland sites by 2013

Action	Target Date	Lead	Other Partners
1. Continue to attend the London Heathland Habitat Action Plan Group	2008 - 2013	LBH	HNCF
2. Attend all training sessions deliver as part of the London Heathland Habitat Action Plan Group	2008 - 2013	LBH, HNCF	
3. Disseminate best practice	2008 - 2013	LBH, HNCF	

Research and Monitoring

Target 1 In conjunction with the London Heathland Habitat Action Plan monitor on an annual basis the extent of the heathland within Harrow by 2013

Action	Target Date	Lead	Other Partners
1. Submit all past heathland records to GIGL	2008	HNCF	GIGL
2. Attend training session performed by the London Heathland Habitat Action Plan	2008	LBH, HNCF	
3. Erect posts to act as reference points, take photographs annually from these points. Perform an annual vegetation survey of the area restored and submit records to GIGL	2008 - 2013	HNCF, LBH	GIGL
4. Monitor the affect of the management programme at Stanmore Comment and Harrow Weald Common, by performing vegetation surveys	2009 - 2013	HNCF, LBH	GIGL
5. Monitor impact of grazing on heathland species populations	2012 - 2013	LBH	HNCF

Raising Awareness

Target 1 Promote the importance of heathland to residents, especially those living close to Stanmore Common by 2013

Action	Target Date	Lead	Other Partners
1. Circulate the leaflets produced as part of the London's Heathland Heritage project to residents of the Grove estate	2008	LBH	
2. Continue to circulate leaflets produced as part of the London's Heathland Heritage project to libraries and the civic centre	2008 - 2013	LBH	
3. Erect the interpretation panel produced as part of the London's Heathland Heritage project in Stanmore Common car park	2008	LBH	

8. Other Relevant Action Plans

Harrow Biodiversity Action Plan

- Heath Spotted Orchid Species Action Plan
- Grassland Habitat Action Plan

London Biodiversity Action Plans

- Heathland Habitat Action Plan
- Acid Grassland Habitat Action Plan

Contact Details

Biodiversity Action Plan Officer
 Harrow Council, Community & Environment,
 3rd Floor,
 P.O. Box 37,
 Civic Centre,
 Harrow
 HA1 2UY
 Tel 020 8736 6080

Email: ldf@harrow.gov.uk

Abbreviations

HNCF - Harrow Nature Conservation Forum
 HWCC - Harrow Weald Common Conservators
 LBH - London Borough of Harrow
 GIGL - Greenspace Information for Greater London



1. Aims

- Increasing the range and quality of habitats for wildlife found within Harrow's Parks
- Use Harrow's Parks to raise residents and decision makers awareness about the value of the natural world
- To raise awareness of the wildlife value of parks, especially amongst those who work in Harrow's park

2. Introduction

Modern Parks can be defined as an area of open space used for formal and informal public recreation. So places such as Bentley Priory Open Space would not qualify under the definition as it has no formal areas for public use. The primary requirement is to provide access to open space for informal and formal use by people. This is through the provision of amenity grassland and sports and play areas.

The scope of this plan will also cover amenity grasslands and sports pitches. As the urban landscape is increasingly developed, parks become increasingly important, as they give people physical and psychological enjoyment and a break from an increasingly frantic urban lifestyle.

For wildlife, parks are also a lifeline as they remain undeveloped areas. Parks provide a feeding and nesting resource, a park with older trees and dense bushes will give nesting opportunities and berry bearing bushes and the short grass allows grazing birds to feed on soil invertebrates. Parks cannot alone support a wide range of wildlife they

are not isolated ecologically and the network of gardens around the park are as important for wildlife as the park itself.

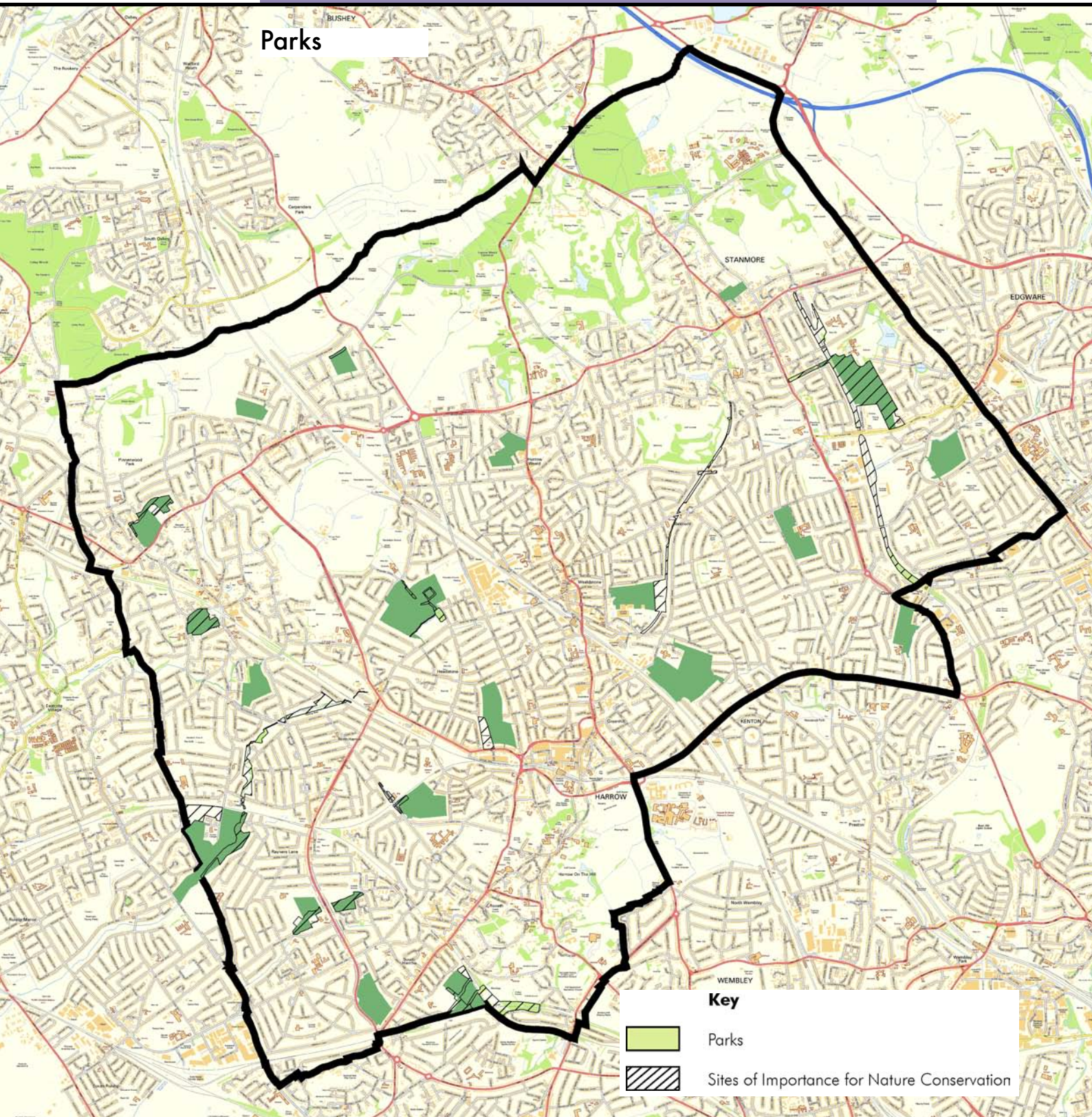
Parks traditionally have not managed to be wildlife friendly as the grass is cut repeatedly and the cuttings left and dead or dying trees are felled. Where a park has fallen into neglect, the wildlife may actually improve as hedges thicken and ruderal weeds (which colonise waste ground) flourish. Parks need to be maintained, but a balance between managing the site for public enjoyment and wildlife interest needs to be achieved.

Recently there has been an increasing national trend to improve parks for wildlife. This has undoubtedly been driven by the BAP process. Across the UK there have been various schemes. In Nottinghamshire the Blue Butterfly Plaque Scheme (devised by the Wildlife Trust) and adopted by the County Council for leaving areas within parks undisturbed has been a great success and many of its urban parks have such areas. In London the Royal Parks now have unmown grassland areas in all their parks. Hounslow due to an in-house ecology team seem particularly good at recognising, protecting and increasing habitat within parks. This includes Hanworth Park's large area of acid grassland and Cranford Park's rotational meadow management scheme.

3. Current Status

There are 21 open spaces which are consider to be parks or recreation areas within Harrow. A number of these open spaces are within areas designated as SINC's. The following maps shows parks and recreation grounds within Harrow and also the SINC areas which they are part of.

Park & Amenity Grassland Habitat Action Plan



4. Specific Factors Affecting the Habitat

These are factors affecting the habitat currently either national, specifically in Harrow or both.

▪ **Direct Loss of parks or open space**

Harrow is subject to as much development pressure as anywhere else in the south east of England and parks and playing fields could be considered as being under threat from development.

▪ **Cost**

Councils derive most of their income from central government and parks and open spaces can be a low priority and as such expenditure on maintenance and staff levels. These impacts upon the level of management parks receive.

▪ **Training**

Improving parks for wildlife can only be achieved, if staff performing management work, are correctly trained. The effect on wildlife of traditional management on parks has to be realised and that wildlife improvement involves more than putting up a few bird boxes. Critically important is training on invertebrate conservation, as this is the key group to concentrate on as all other wildlife improvements devolve from them.

▪ **Increased public use**

As we lose our urban greenery and populations rise, parks become even more used and this will result in more disturbance and damage. More dogs mean more urine damage. But more usage also provides a potential volunteer base to become involved in park management issues.

▪ **Pesticides and unsustainable practices**

In the horticultural management of open spaces, chemical usage is necessary on occasion. It can be damaging to wildlife by the removal of seed bearing weeds or poisoning birds and animals by the incorrect placing of rodenticides or molluscicides (chemical agents for killing rodents or molluscs, such as snails).

Also chewing up of tree stumps, the smothering of ground vegetation with bark chippings and the use of peat are all directly or indirectly damaging to wildlife.

▪ **Traditional management practices**

There is a conflict between traditional formal park management and wildlife. An area rich in wildlife needs a mixture of habitats and undisturbed areas to complete life cycles. To improve the parks for wildlife a more flexible approach to park management is needed.

- **Public perception**

It is ingrained into our nature to control the environment around us. There is a public perception of what a park should look like, with neat mown grass and a few lollipop trees. Also people feel parks can be unsafe places and they want good sightlines with few bushes and shrubs. Yet at the same time some people want a wilder feel to their public parks. Management of parks must change and at the same time the public should be informed and educated about what is going on and why.

5. Current Action

5.1 Legal Status

Although the Wildlife and Countryside Act 1981 does not directly protect parks as a habitat. It does offer protection to many plant and animal species found within parks sites. The Act prohibits the unauthorised intentional uprooting of any wild plant, although it is not normally an offence to take fruit, foliage, fungi or flowers. Additional protection is given to plants listed on schedule 8 forbidding any picking, uprooting or destruction. The Wildlife and Countryside Act 1981 also gives protection to various animal species associated with parks, for example reptiles, birds and some mammals.

Furthermore, the need to conserve parks as a habitat may be a relevant consideration as part of the wider duty under Section 40 of the Natural Environment and Rural Communities Act 2006 to consider biodiversity conservation issues in exercising other functions.

5.2 Mechanisms targeting the habitat

The following management and restoration actions are ongoing. They need to be supported and continued in addition to the action listed under Section 7.

- **Friends of Groups and User groups**

The Friends of Cannons Park, established in 2003 to support the restoration work to the park, are interested in the long term management and use of the park. Recently a training programme has been agreed with Groundwork to equip volunteers with the knowledge and skills to perform practical conservation work. There are also several User Groups for parks, although these groups are not explicitly concerned with the wildlife of the site.

The Pinner Association was established in 1932 and has been involved with the restoration of Pinner Memorial Park and the peace garden.

- **Peat usage**

The council does not use peat based compost in the management of plant bedding areas with parks.

- **Chemical usage**

The council is reducing the amount of chemicals used in parks management.

- **Cut and collect policy for roadside verges**

The council operates a policy of collecting the grass cuttings from roadside verges, this dramatically reduces the nutrients in the soil.

- **Leaving long areas of grass**

The council is experimenting with leaving long areas of grass within parks.

6. Flagship Species

These special plants and animals are characteristic of Parks in Harrow



Oak

Probably the most common tree in Britain.



Ox-eye daisy

Often found in lawns, if left uncut this plant can grow up to nearly a metre tall.



Garden spider

Spiders webs are often seen on dewy mornings glistening in the sun.



Grasshopper

Easily noticed due to the noise they make by rubbing their hind legs against their forewings.

7. Targets and Actions

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.

Please note that the partners identified in the tables are those that have been identified 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.

Policy and Strategy

Target 1 To ensure the value of parks and open spaces are recognised within the planning process by 2009

Action	Target Date	Lead	Other Partners
1. To include contributions for parks within the forthcoming Supplementary Planning Document for Section 106 Contributions	2008	LBH	
2. Work with the LDF team, to inform policy development relating to parks	2008	LBH	

Habitat Management and Creation

Target 1 To promote the good management of parks and where possible increase the wildlife value of areas by 2013

Action	Target Date	Lead	Other Partners
1. Develop a list of management prescription to benefit wildlife	2008	LBH	
2. Develop a list of features which could be created to benefit wildlife	2008	LBH	
3. Review existing management plans and incorporate points from previous two actions where physically and financially feasible	2010	LBH	
4. Incorporate wildlife beneficial regimes into all new management plans	2008 - 2013	LBH	Pinner Association
5. Continue to perform a cut and collect regime to road verges	2008 - 2013	LBH	
6. Consider enhancing nutrient depleted road verges by sowing fine grasses and/or wildflowers or planting plug plants	2012	LBH	
7. Continue to implement no peat usage policy	2008 - 2013	LBH	
8. Continue to review chemical use in parks and where physically and financially feasible seek to reduce use	2008 - 2013	LBH	
9. Management for biodiversity to be included within nominations for Green Flag awards	2008 - 2013	LBH	

Advisory

Target 1 To ensure all involved in parks management are aware of the role they play in maintaining and enhancing the wildlife value of parks

Action	Target Date	Lead	Other Partners
1. Develop links between friends of groups and users groups with Harrow Nature Conservation Forum	2008	LBH HNCF	Pinner Association, Hatch End Association
2. Develop links between different council departments, voluntary organisations, contractors and external organisation to ensure effect communication about parks management	2008	LBH	
3. Develop and deliver an in house training session for parks staff and contractors about why and how parks are a haven for wildlife	2008 - 2013	LBH	

Research and Monitoring

Target 1 To develop a survey methodology for schools to use to record the significant features of parks by 2008

Action	Target Date	Lead	Other Partners
1. Develop survey methodology	2008	LBH	HNCF
2. Develop a pack for schools to use, obtain funding if necessary	2008	LBH	
3. Pilot pack with selected schools	2008	LBH	
4. Publicise project to schools	2008 - 2013	LBH	
5. Plot results on GIS or submit to GIGL	2008 - 2013	LBH	GIGL
6. Publicise results of survey	2008 - 2013	LBH	

Raising Awareness

Target 1 To raise public awareness and enjoyment of parks in Harrow by 2012

Action	Target Date	Lead	Other Partners
1. Include information about wildlife management into all new park interpretation boards	2008 - 2013	LBH	Park users
2. Develop a suite of temporary interpretation boards, to be used initially, when a management regime is altered or changed	2008 - 2013	LBH	Park users
3. Encourage residents without gardens to survey parks, as part of the Garden and Allotments Habitat Action Plan	2008 - 2013	LBH	
4. Introduce a competition for the most wildlife friendly parks	2009	LBH	

8. Other Relevant Action Plans

Harrow Biodiversity Action Plan

- Grassland Habitat Action Plan
- Garden and Allotment Habitat Action Plan

London Biodiversity Action Plans

- Parks and urban greenspaces Habitat Action Plan

Contact Details

Simon Braidman, Harrow Nature Conservation Forum

Abbreviations

GIGL - Greenspace Information for Greater London

HNCF - Harrow Nature Conservation Forum

LBH - London Borough of Harrow



1. Aims

- To promote wider awareness of wetland habitats
- Monitor the status of standing water and water course within Harrow
- To provide management advice to private landowners to maximise the biodiversity value of water bodies

2. Introduction

For the purpose of this action plan, standing and running water habitats are being considered under one habitat action plan. Although both habitats provide different conditions for wildlife, many of the issues affecting these habitats are similar.

Standing water is defined as any area of water which is non-flowing and includes water bodies which do not contain water all year round, usually referred to as seasonal ponds. The following are types of standing water bodies found in Harrow.

- Lakes (natural or man made)
- Ponds (including those in private gardens)
- Balancing ponds
- Ditches
- Wetland margins
- Marshland
- Wet woodland
- Flushes

Although seasonal ponds generally hold fewer wetland species compared to ponds which hold water all year round, this does not diminish their value to wildlife. It has been established that despite holding fewer species, those which are found in this type of pond tend to be rarer species. Also shallow water bodies, those less than 1 metre

deep, tend to offer the best habitat for wildlife.

Standing water bodies are often classed by the nutrient level of the pond

- Oligotrophic (nutrient poor)
- Eutrophic (nutrient rich)
- Mesotrophic (an intermediate state)

Running water habitats include rivers and streams, which are classified according to the geology, altitude, physical characteristics and the plant communities.

Both standing and running water habitats support a vast array of wildlife, both plants and animals. Depending on the requirements of the wildlife, they may use the water habitats for their entire lifecycle, whilst other species may only use the water at certain stages in their life cycle, for example to breed. Due to the linear nature of rivers and streams they can also act as wildlife corridors allowing wildlife to move from one area to another. It is also important for ponds to not be isolated.

3. Current Status

The table below details the watercourses found in Harrow.

Ordinary Watercourse	Open Km	Culverted Km	Total Km
Constons Brook	0.49	0.69	1.18
Edgware Brook	7.68	10.08	17.76
River Pinn	5.37	3.17	8.54
Roxbourne Brook	1.03	3.25	4.28
Roxeth Recreation Ground	0.82	0.20	1.02
Smarts Brook	1.05	2.14	3.19
Wealdstone Brook	0.75	8.53	9.28
Woodrings Brook	9.99	2.72	12.71
Yeading Brook	1.71	6.24	7.95

Main River	Open Km	Culverted Km	Total Km
Edgware Brook	3.98	1.84	5.82
Kenton Brook			0.77095
River Colne (flowing north from Borough)	9.10	0.0	9.1
River Pinn	3.52	0.53	4.05
Sadlers Mead Drain			0.047918
Wealdstone Brook	0.58	0.09	0.67
Woodhall Gate Ditch			0.869798
Woodridings Stream			2.343134
Yeading Brook	2.80	0.17	2.97
Yeading Brook (East Arm)			0.837225

Harrow is known to have one of the highest densities of ponds in the capital at 16 per square kilometre. Some of the biggest are Canons Lake - Edgware, Summerhouse Lake - Bentley Priory as well as Squirrels Lake and Serpentine Lake in Harrow School grounds.

There are also numerous smaller ponds within Harrow. Some are found within council managed parks and open spaces, however the majority of ponds are thought to be located within private gardens in the borough.

4. Specific Factors Affecting Habitat

These are factors affecting the habitat currently either nationally, specifically in Harrow or both.

▪ Loss of habitat

Many ponds in private gardens are thought to have been lost. Ponds can also be lost due to natural processes. If a pond is left unmanaged the pond will gradually fill up with sediment and more complex vegetation will take over. Eventually the pond will no longer be an area of open water and may even dry out completely. Ponds are also being filled in either due to health and safety concerns or people wanting to use the space for another purpose.

▪ Stocking ponds with fish

Predation by fish can be problematic to frog populations, as fish will readily eat tadpoles. Fish also predate the eggs of toads and newts too.

▪ Habitat isolation

Many mobile wildlife species will move from one pond to another. Habitats can easily become isolated, for example by the removal of a linking habitat or the creation of physical barriers such as roads. An isolated population will quickly become vulnerable due to inbreeding, disease and predation, with no potential for individuals to come in and replace a lost population.

Many amphibian species return to the same pond each year. Toads are especially well known for using the same route each year to return to their birth pond to breed. If these routes become intersected by roads, large numbers of toads are thought to be killed each year when attempting to cross roads.

▪ Invasive Species

There are a number of invasive plant and animal species, which can cause problems to native wildlife if not controlled. The introduction of the signal crayfish has had a dramatic impact upon the native crayfish. Not only does the Signal Crayfish out compete the native Crayfish, but it also spreads a fungal disease, which the native Crayfish have no defence from. There are also many problem plant species, which grow incredibly fast, either covering waterbodies and rivers or their banks and

preventing other vegetation from growing. These include Japanese knotweed, Himalayan balsam and Australian swamp stonecrop.

- **Misconnections of foul sewage and domestic appliances into surface water drain**

Some premises have two drainage outlets for water leaving the premises. Water not requiring treatment i.e. water collected from the roof is discharged into the surface water drain, which flows straight into rivers. Water that does require treatment before entering the river system is discharged into the foul water drains. Typically this includes water from toilets, household appliances and sinks. However there are instances when foul water is mistakenly connected to the surface water drain causing pollution to the local river system. It can be expensive and also time consuming to identify where these misconnections are occurring.

- **Fly tipping**

Unfortunately standing and running water habitats are often used for the disposal of rubbish. Presumably it is hoped, by those disposing of the rubbish, that it will not be visible under the water level. The removal of rubbish from water bodies and watercourse can require specialist machinery, making it an expensive operation.

- **Climate change**

Currently it is not known what the effects of climate change will be on wildlife. However it is expected that variations in weather patterns will occur. This means that water shortages are likely to be an on-going issue along with increased localised flooding due to weather changes.

- **Development pressure**

National problems have occurred when flood plains have been developed, causing local flooding to worsen. Development is also thought to have contributed to the loss of garden ponds, as householders opt to fill in their pond to provide space for a development.

- **Pollution**

Standing and running water habitats are sensitive to pollution. Pollution can enter the water in the form of run-off from roads or land or be discharged directly into the water bodies. Pollution can be toxic to plant and animal species, causing the wildlife value of the area to diminish. Pollution can also cause the nutrient level of the water to rise, this is called eutrophication which can also be harmful to wildlife.

- **Disturbance**

Humans, livestock and dogs can easily disturb water bodies causing damage to the banks and disturbing wildlife and sediment.

▪ Angling

Disturbance and damage to banks and emergent vegetation can be caused. Discarded fishing lines and hooks, are not only unsightly but can be dangerous for other users and wildlife. Ponds which are routinely stocked with fish can lead to severe damage of biodiversity through eutrophication, silt disturbance and predation.

5. Current Action

5.1 Legal Status

All native species of amphibians and reptiles are protected under the Wildlife and Countryside Act 1981 (as amended), however the level of protection varies between species.

Great crested newts, natterjack toads, sand lizards and smooth snakes are given full protection under the Wildlife and Countryside Act 1981 (as amended). This prohibits the intentional killing, injuring or taking (capture, etc) possession, intentional disturbance whilst occupying a 'place used for shelter or protection' and destruction of these places, sale, barter, exchange, transporting for sale and advertising to sell or to buy.

Great crested newts are offered another level of protection, by being included within the Conservation (Natural Habitats & C.) Regulations 1994. If work is required which is likely to affect great crested newts, Natural England must be consulted and a licence obtained from Defra.

The common lizard, slow-worm, grass snake and adder are protected under the Wildlife and Countryside Act 1981 (as amended) against killing, injuring and sale.

The smooth and palmate newt, common frog and common toad are only protected against being sold under the Wildlife and Countryside Act 1981 (as amended).

Rivers and ponds are UK priority habitats and therefore receive some protection, in respect to planning issues via Planning Policy Statement 9 Biodiversity and Geological Conservation.

Similarly, the general duty to facilitate biodiversity conservation under Section 40 of the Natural Environment and Rural Communities Act 2006 should ensure that the role played by rivers and ponds as natural habitats is taken into account in exercising relevant functions such as making policies or planning decisions.

5.2 Mechanisms targeting the species

The following management and restoration actions are ongoing. They need to be supported and continued in addition to the action listed under Section 7.

▪ **Surveys as part of planning application**

Several surveys for amphibians and reptiles have been included as part of planning applications.

▪ **GIGL**

Since 2006 Harrow Council has held a service level agreement with GIGL. The information, which GIGL provide is used to ascertain if planning applications, may impact upon reptiles.

▪ **Crane Valley Partnership**

Since 2006 Harrow Council has been a partner in the Crane Valley Partnership. The partnership is lead by Green Corridor, an environmental charity linking people and places in west London and the London Wildlife Trust. In 2007 a grant was received from the Heritage Lottery Fund to investigate what improvement could be made to parks adjacent to the River Crane, in Harrow the Yeading Brook. It is hoped that in 2008 a grant will be gained to implement these improvements.

▪ **River Pinn de culverting**

In 2006 a major project was undertaken to deculvert the River Pinn in Hatch End. Although primarily to reduce flooding problems the new river channel was designed to maximise the wildlife value of the new river.

▪ **Flood alleviation works at Oxhey Lane Farm**

A planning application has been made to construct a flood defence, this would cause the temporary flooding of the southern fields of Oxhey Lane Farm, but would prevent nearby housing from flooding. This project has the potential to maximise the wildlife value of these fields.

6. Flagship Species

These special plants and animals are characteristic of standing and running water in Harrow



Willow

A graceful tree which has its roots in wet soil.

Copyright Steve Bolsover



Frog

Often found in ponds



Dragonfly

Are often seen around ponds feeding off insects. Their larvae live in slow moving water or ponds and eat aquatic insects, tadpole and small fish



Kingfisher

These brightly coloured birds can be seen along rivers as they feed on fish and aquatic insects.

7. Targets and Actions

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.

Please note that the partners identified in the tables are those that have been identified 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.

Policy and Strategy

Target 1 To identify at an early stage, planning applications which have the potential to impact upon wetland habitats by 2013

Action	Target Date	Lead	Other Partners
1. Adopt Association of Local Government Ecologists validation checklists	2008	LBH	
2. Provide training for planning administration staff and officers about the new system	2008	LBH	
3. Make validation checklist available on planning pages of the council's website	2008	LBH	
4. Monitor the use of the new system	2008 - 2013	LBH	
5. Provide developers note performing mitigation work, with information about how wetland habitats can be incorporated	2008 - 2013	LBH	
6. Comment on all planning applications where there is the potential to influence positive outcomes for standing and running water	2008 - 2013	LBH	EA

Habitat Management and Creation

Target 1 To ensure that projects performed by the Environment Agency and Harrow Council, incorporate features for wildlife by 2013

Action	Target Date	Lead	Other Partners
1. Develop and maintain links with the Environment Agency	2008	LBH	EA
2. Attend project planning meetings as and when necessary	2008 - 2013	LBH	EA
3. Comment on all planning applications where there is the potential to influence positive outcomes for standing and running water	2008 - 2013	LBH	EA

Target 2 Promote good management of wetland habitats, ensuring the wildlife value is maintained and where possible enhanced by 2013

Action	Target Date	Lead	Other Partners
1. Implement management plans prepared for the two ponds at Little Common in Stanmore	2009	LBH	
2. In association with the Reptiles and Amphibians Habitat Action Plan review management plans for council managed ponds and amend if necessary	2010	LBH	
3. Implement amended management plans	2010 - 2013	LBH	
4. Develop links with neighbouring authorities, to enable a co-ordinated approach to invasive species control	2008	LBH	
5. Compile a list of grant source for pond creation and improvement works, regularly review and circulate to land managers	2008 - 2013	LBH	
6. Obtain funding to perform a major biodiversity enhancement projects for either standing or running water in the borough	2013	LBH	EA

Advisory

Target 1 To promote good pond management by offering management advice to all privately managed ponds by 2010

Action	Target Date	Lead	Other Partners
1. Using aerial photography produce an inventory of large privately managed ponds	2008	LBH	
2. Circulate a guidance leaflet (either internally produced or from an external organisation)	2008	LBH	EA
3. Include information about pond management into workshop session delivered as part of the BAP	As necessary	LBH	

Research and Monitoring

Target 1 Develop a system to enable the condition of water bodies to be monitored by 2013

Action	Target Date	Lead	Other Partners
1. Develop a simple survey form to be circulated to owners identified in previous target.	2008 - 2013	LBH	Private land owners
2. If funding is available survey council owned ponds using the National Pond Survey Method	2012	LBH	
3. Develop a surveying methodology to be used when surveying rivers and streams	2010	LBH	EA
4. Identify which key water courses should be surveyed	2010	LBH	EA
5. Recruit volunteer recorders	2010	LBH	
6. Survey key water courses	2010 - 2013	LBH	Volunteers
7. Include question relating to ponds in the garden survey performed as part of the Garden and Allotment Habitat Action Plan	2008 - 2013	LBH	
8. Survey establishment of wildlife along the new section of River Pinn at Hatch End	2008-2013	HNHS	LBH, GIGL

Raising Awareness

Target 1 To raise awareness and enjoyment of all wetland habitats in Harrow by 2013

Action	Target Date	Lead	Other Partners
1. Obtain funding to produce an interpretation panel specifically explaining pond ecology	2012	LBH	
2. Obtain funding to produce an interpretation panel specifically explaining river ecology	2012	LBH	EA
3. Continue to be a partner in the Crane Valley Partnership	2008 - 2013	LBH	CVP
4. Identify areas of water course which are currently inaccessible or not visible for pathways bearing in mind the need for low disturbance areas for wildlife	2010	LBH	
5. Develop projects which seek to solve the problems identified in previous action	2010	LBH	EA
6. Obtain funding if necessary	2011	LBH	EA
7. Deliver projects	2012	LBH	EA
8. Promote the construction of wildlife friendly ponds	2008 - 2013	LBH	
9. Develop a partnership with the Grims Dyke Hotel to restore the lake at Old Redding	2008	LBH	
10. Investigate the financial and physical feasibility of restoring the lake	2008	LBH	
11. Obtain fund to perform restoration work	2010	LBH	
12. Perform restoration works	2013	LBH	

8. Other Relevant Action Plans

Harrow Biodiversity Action Plan

- Reptile and Amphibian Species Action Plan
- Bat Species Action Plan
- Garden and Allotment Habitat Action Plan

London Biodiversity Action Plans

- Rivers and Streams Habitat Action Plan
- Standing Water Habitat Action Plan

Contact Details

Biodiversity Action Plan Officer
Harrow Council, Community & Environment,
3rd Floor,
P.O. Box 37,
Civic Centre,
Harrow
HA1 2UY
Tel 020 8736 6080
Email: ldf@harrow.gov.uk

Abbreviations

CVP - Crane Valley Partnership
EA - Environment Agency
GIGL - Greenspace Information for Greater London
HNHS - Harrow Natural History Society
LBH - London Borough of Harrow

Credit Steve Bolsover



1. Aims

- Highlight the importance of wasteland sites for wildlife
- Identify vacant wasteland sites in Harrow and assess their wildlife value
- Provide guidance about appropriate means of mitigation for brownfield development sites

2. Introduction

According to the London Wasteland Habitat Action Plan all wasteland falls within the term 'brownfield' or 'previously developed land'. In this context the non-exhaustive definition of brownfield land is previously developed land (which has or did have permanent structures on it), the industrial, commercial or residential use of which has declined or ceased or it has become contaminated but which has redevelopment potential. Land in built up urban areas which has not previously been developed (e.g. parks, recreation grounds, allotments) is not classified as brownfield.

Due to the past use of brownfield sites, many sites are covered in building rubble or disused hard surfaced areas, which provide a free draining nutrient poor and drought prone soil. This provides a harsh environment for plants to grow in. However there are some plants which are suited to growing in these conditions they are usually known as ruderal plants. The term ruderal applies to plants which are associated with colonising a piece of land which is free from vegetation. It is very unusual to find areas of land which are being colonised by plants, making many ruderal plant species rare.

Many wasteland sites are unmanaged, which means that once ruderal plants start colonising the area, over time other plants and animals will start to establish. This means that a variety of different habitats can be found on wasteland sites; bare ground, sparsely vegetated areas,

patches of grasses and wildflowers to areas of scrub and trees. Bare ground, as a feature is covered by the Bare Ground Habitat Action Plan.

The variety of habitats associated with wasteland means that a wide range of wildlife can be found on these sites. Nesting and foraging birds can often be seen, along with many butterflies, bees, wasps, other invertebrates and reptiles. Within an urban environment, with few open spaces, wasteland can actually provide local people with an opportunity to experience nature. In the past it has been open countryside that has been considered to be full of wildlife, however many modern agricultural practices have meant that some areas no longer benefit from an abundance of wildlife and these urban sites can help fill this gap.

Pressure from development has meant that many wasteland sites have been developed. Planning Policy Statement 3 Housing, sets a national annual target that at least 60% of all new housing should be provided on brownfield sites. It does however exclude from the definition of brownfield areas which have over time naturally blended into the surroundings, to the extent that it can be reasonably considered as part of the natural surroundings. However wasteland sites which are still undergoing early plant colonisation are unlikely to be considered to blend into their surroundings, yet may still support important wildlife.

It is inevitable that some wasteland sites will be developed, however appropriate mitigation can reduce the negative impact of the development on the wildlife of the site. The most successful way of achieving this is by incorporating brown roofs into the design of the development. Brown roofs contain crushed fine material derived from rubble already found on the site. Not only does this material absorb rainwater and help to hold water during heavy showers which helps to prevent flooding, it is also colonised by plants, from seeds and roots within the rubble and therefore provides an undisturbed habitat for wildlife within the development.

3. Current Status

Currently within the council the only land use data available incorporates wasteland within vacant land category.

4. Specific Factors Affecting the Habitat

These are factors affecting the habitat currently either national, specifically in Harrow or both.

- **Lack of knowledge about wildlife value of wasteland sites**

Due to the harsh and derelict appearance of many wasteland sites, it is possible for the association between wasteland sites and wildlife not to be established, putting these areas at risk from development and inappropriate landscaping.

Developers consider wasteland sites as prime areas for development, as they are aware of the national target for housing provision on brownfield sites, but may not consider the impact of their development on the wildlife established on the wasteland site. Due to the appearance of wasteland sites, coupled with a lack of understanding of their wildlife value, residents may prefer for the site to be developed. They may also lobby the site manager to actively manage or landscape the site in a belief that the site is neglected and requires management.

▪ **Disturbance**

Demolishing buildings or clearing rubbish left over from the previous use of the site causes disturbance. For some wildlife, especially plants which thrive in disturbed soil for example Rosebay Willow Herb, this disturbance can be beneficial but there are equally many types of wildlife which prefer to be undisturbed.

▪ **Contamination**

If the wasteland has previously been used for industrial purposes, it is possible that the site could be contaminated. This contamination may affect the wildlife on the site and may also be a public health issue. Decontaminating land can be an expensive process, and may mean that although the wasteland remains undeveloped, the public cannot access the site.

▪ **Pressure from development**

The annual national target to provide 60% of new housing on brownfield sites results in wasteland sites being continually under pressure from development. Developers and local authority planners may be unaware that wasteland sites can be a haven for wildlife and that wildlife should be considered as part of the planning process. Suitable mitigation should be included within the proposals, where necessary.

▪ **Illegal Activities**

Often wasteland areas are within urban areas, yet fenced off from the surroundings, making them secluded areas where antisocial behaviour such as fly tipping, drug taking and arson can take place.

▪ **Creation of wasteland areas**

There has been a decline in the creation of wasteland sites across London, mainly because the number of industries relocating out of London has reduced significantly. This coupled with the pressure for wasteland sites to be reused has reduced the number of sites of at least 5 to 10 years of age, which are most likely to exhibit the conditions required for scarce invertebrates species to colonise.

▪ **Lack of public access**

Many wasteland sites are not open to the public, either because they are unsafe or the owners are not willing to allow access. Therefore many

people are being deprived of the opportunity to experience nature within an urban environment.

It also means that the wildlife cannot easily be monitored, and the true wildlife value of many wasteland sites remains unknown.

5. Current Action

5.1 Legal Status

There is no direct legal protection for wasteland. However wastelands may support species protected by the Wildlife and Countryside Act 1981 and The Conservation (Natural Habitats, &c.) Regulations 1994 and thereby acquire some degree of indirect protection. For example nest birds or reptiles such as grass snakes.

In addition, the general duty to have regard to biodiversity conservation under Section 40 of the Natural Environment and Rural Communities Act 2006 should ensure consideration is given to the protection of wasteland whenever the exercise of the Council's functions has a bearing on the issue..

5.2 Mechanisms targeting the habitat

The following management and restoration actions are ongoing. They need to be supported and continued in addition to the action listed under Section 7.

▪ Buglife

Buglife is a project carrying out research into the importance of brownfield land in supporting invertebrate populations, this is part of their All of a Buzz project.

6. Flagship Species

These special plants and animals are characteristic of wasteland in Harrow

Credit Mike Hammett/Natural England



Common lizard

Are commonly found on wasteland sites. At night, they shelter within vegetation, beneath logs, stones and other materials, such as carpet.



Ground beetles

Are commonly found on wasteland sites.



Credit Peter Wakely/Natural England

Rosebay willow herb

'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 or disturbance.



Teasel

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 seed heads.

7. Targets & Actions

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.

Please note that the partners identified in the tables are those that have been identified 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.

Policy and Strategy

Target 1 To ensure that any development on wasteland includes an appropriate mitigation strategy which is delivered and monitored by 2013

Action	Target Date	Lead	Other Partners
1. Adopt using the Association of Local Government Ecologist Validation Checklist of planning applications	2008	LBH	
2. Aid developers, to produce robust mitigation strategies	2008-2013	LBH	
3. Ensure that developers monitor the impact of mitigation strategies	2008-2013	LBH	

Habitat Management and Creation

Target 1 To ensure that wasteland sites which are or become actively managed, are managed appropriately by 2013

Action	Target Date	Lead	Other Partners
1. Identify the location of wasteland sites in the borough	2009	LBH	
2. Approach land owners, if known, and offer advice regarding appropriate management	2009-2013	LBH	Land owners
3. Implement appropriate management	2009-2013	LBH	Land owners

Advisory

Target 1 Disseminate information to developers highlighting the importance of wasteland by 2008

Action	Target Date	Lead	Other Partners
1. Link the planning webpage to the Buglife website	2008	LBH	Buglife
2. Make the Natural England leaflet on living roofs available of the planning webpage	2008	LBH	
3. Research offer literature available concerning the development of brownfield sites and disseminate to developers and officers	2008 – 2013	LBH	

Research and Monitoring

Target 1 To assist Buglife, when requested, with the delivery of the All of a Buzz project within Harrow by 2013

Action	Target Date	Lead	Other Partners
1. Assist Buglife as and when necessary	2008-2013	LBH	Buglife

Target 2 To establish a programme of monitoring wasteland sites by 2013

Action	Target Date	Lead	Other Partners
1. Identify the location of wasteland sites in the borough	2008	LBH	
2. Approach land owners, if known, and request access to perform ecological monitoring	2008-2013	LBH	Land owners
3. Investigate whether surveying can be performed as part of the Buglife All of a Buzz project	2008	LBH	Buglife
4. If above action not possible, obtain funding for next action if necessary	2009	LBH	
5. Either employ a professional ecologist or run a training programme for local volunteers	2009-2013	LBH	Professional ecologist/volunteers
6. Survey sites	2009-2013	LBH	Professional ecologist/volunteers
7. Submit records to GIGL	2009-2013	LBH	GIGL

Raising Awareness

Target 1 To raise awareness of the importance of wasteland as a habitat for wildlife to the public by 2013

Action	Target Date	Lead	Other Partners
1. Assist Buglife as and when necessary in publishing London wide events	2008-2013	LBH	Buglife
2. Encourage the owner of a safe wasteland site to allow public access for a guided walk	2009-2013	LBH	

8. Other Relevant Action Plans

Harrow Biodiversity Action Plan

- Bare Ground Habitat Action Plan

London Biodiversity Action Plans

- Wasteland Habitat Action Plan

Contact Details

Biodiversity Action Plan Officer
 Harrow Council, Community & Environment,
 3rd Floor,
 P.O. Box 37,
 Civic Centre,
 Harrow
 HA1 2UY
 Tel 020 8736 6080
 Email: ldf@harrow.gov.uk

Abbreviations

GIGL - Greenspace Information for Greater London
 LBH - London Borough of Harrow



1. Aims

- To conserve and enhance the condition of woodlands within Harrow for biodiversity
- To maintain and increase public interest and use of woodland sites in the borough
- To develop woodlands as an educational resource for schools to utilise

2. Introduction

Woods are the climax vegetation for land in Harrow. If an area were left alone and neither managed nor disturbed by man, it would become woodland within about twenty years and would remain woodland thereafter, although the tree species would change with the years. What the final composition of the wood would be is less clear. Most older woods in the south of England are dominated by oak, ash and beech, but it is argued that this is a consequence of their management in medieval and later times; oak and beech seeds especially being useful as fodder for pigs. Neither oak nor ash saplings can grow in the dim light under their parents, so woodland made up of these species is not

self-sustaining. Some experts believe that a truly natural forest in southern England would comprise mainly lime, beech, wych elm, hornbeam and field maple (Peterken, 1996, p341). The sterility of these arguments has led to the rise of the concept of biodiversity, since all woodlands are more or less a product of human management, let us manage them to maximize their usefulness both as a home for different species and as a resource for people.

The majority of Harrow's woods are recent secondary woodland that has developed in the last 50 years on what were previously open grazed commons or farmland. Only two woods, Heriot's wood within Bentley Priory nature reserve, and Pear Wood, are thought to be ancient, that is, dating from at least 1600 (Peterken, 1996, p17). While this action plan is concerned with woodland it should be noted that recent secondary woodland is often of low biodiversity comprising largely of one or two species and a relatively uniform canopy. It is likely that management of overall biodiversity and amenity would be best served by felling significant areas of trees and restoring grassland or heathland, both of which are rarer habitats. In some locations such as Harrow Weald Common grass and heathland species are still present under the trees and will flourish once the latter are removed. Even when the grass and heathland plants appear absent their seeds are likely to remain viable in the soil and will germinate on removal of the trees.

Woodland should be distinguished from groups of trees in a parkland or street setting. Although there will clearly be a gradation between the two, woodland can be defined as an area of trees in which much of the area is unaffected by phenomena at its edge. At the edge light, rain and wildlife will pass in and strongly influence the local environment, the clearest effect being the denser ground cover permitted by additional light and water. Woodlands are areas of trees of large enough extent that the centre is not so affected.

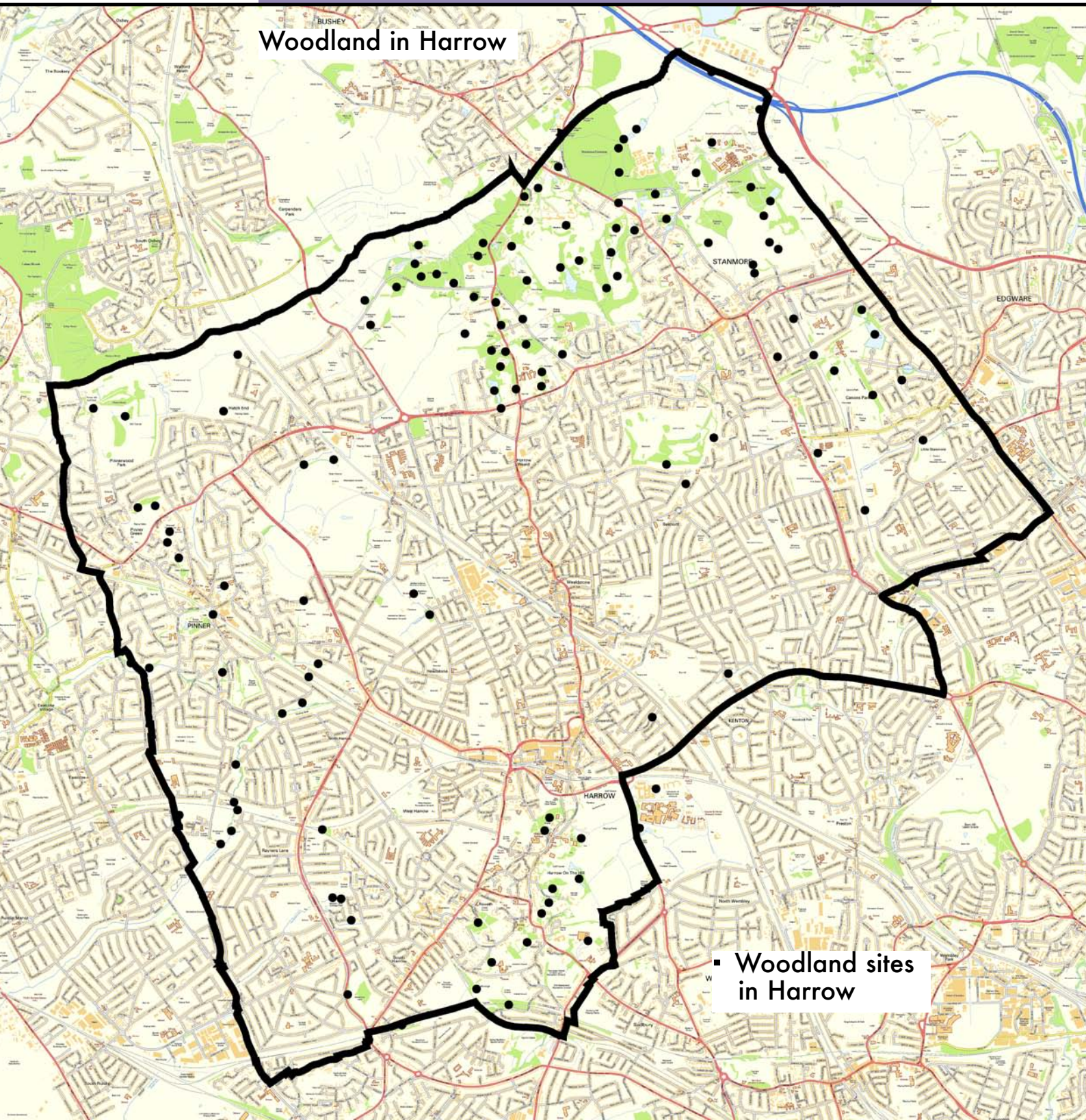
In general English woodlands can be divided into:

- Broadleaved woodland
- Mixed woodland
- Coniferous woodland
- Ancient woodland
- Secondary woodland

3. Current Status

The GLA survey performed during 2003 identified three types of woodland. It is estimated that within Harrow there is 4.8 ha of coniferous woodland, 244.4 ha of native broadleaved woodland and 35 ha of non native broadleaved woodland.

The following map shows areas where woodland was identified by the GLA



4. Specific Factors Affecting the Habitat

These are factors affecting the habitat currently either national, specifically in Harrow or both.

▪ **Inappropriate management and management constraints**

Woodland does not require the level of management required by, for example, open grassland or heathland. In many woodlands the only management required is the cutting of dead standing wood that might otherwise fall and injure people. This must be balanced against the wildlife value of standing decaying timber, the ecological niche of many now rare invertebrates. Dead standing wood should only be cut where it could fall onto roads or paths. Once cut, it should be left on the ground, not removed or burned. Other woods require a more active approach to management. Secondary woodland can easily be dominated by trees of similar ages and work is often needed to create an uneven age structure. Also woods benefit from having open glades, rides and scrub patches, all of which need managing.

▪ **Climate change**

Climate change will increase the stress upon all woodland species. This will lead to the disappearance of some familiar species and their replacement by species at present characteristic of southern Europe. In most cases this change will need to be accepted and guided rather than fought.

▪ **Public access and recreation pressure**

Too many visitors to a site, especially if they leave established paths and walk through the main body of the woodland, compact the soil and eliminate ground cover. For the majority of woods, management will involve welcoming visitors but adopting measures, which should usually be low key and unobtrusive, to keep them to the paths.

▪ **Domestic animal disturbance**

Domestic dogs cause disturbance and stress among birds and other animals. A recent study by Banks and Bryant (Biology Letters 2007; D.O.I. 10.1098/rsbl.2007.0374) showed that disturbance by even well controlled, leashed dogs markedly reduces bird breeding success. If off the leash, dogs can rush through large areas of woodland unsettling ground feeding birds over their entire route. The disturbance is particularly important during two periods: winter and early spring (mid January to mid March), when many finches and thrushes feed on the woodland floor, and the breeding season (March through July) when disturbance can cause a sitting or feeding bird to remain away from the nest for a long period or even abandon it.

Where horse riders leave designated rides they endanger other visitors and degrade paths. Domestic cats are a major predator of wild bird populations. This is a particular problem where new or existing residential areas adjoin land used by rare or ground nesting species.

▪ **Vandalism**

Vandalism can render woodlands unsightly and even threatening to visitors, but individual acts of vandalism are unlikely to cause much long lasting damage unless a major fire is started. However individual specimen trees, in particular the master oak in Bentley Priory Nature Reserve, are certainly at risk from malicious fire setting.

▪ **Invasive species**

Japanese knotweed is a non-native invasive perennial that grows in shade and which spreads by rhizomes that are capable of penetrating resistive barriers, even concrete. It shades out native under storey species and tends to establish an expanding monoculture. Plants and colonies cannot be eradicated by digging them out, since small sections of rhizome left below ground will regenerate, and they therefore must be treated with herbicide.

Rhododendron is a non-native invasive shrub that flourishes under trees and can shade out all other under storey plants. Management plans will in most cases include periodic action to remove it.

Although a British native, holly grows well under the tree canopy and can shade out all other under storey plants, but has presumably been doing so for many years. Old English legends often use the device of a holly hedge in a wood that protects and hides an area within from human disturbance, and belts of holly have the same protective action today. Indeed if holly is spreading this may represent an example of a consequence of climate change that, as noted above, will in many cases need to be accepted rather than fought. Nevertheless management plans may include action to reduce its extent within a woodland.

5. Current Action

5.1 Legal Status

There is no direct legal protection for woodlands. However woodlands support species protected by the Wildlife and Countryside Act 1981 and The Conservation (Natural Habitats, &c.) Regulations 1994. For example nest birds, bats and some mammals.

Lowland mixed deciduous woodland and wet woodland are UK priority habitats and therefore receives some protection, in respect to planning issues via Planning Policy Statement 9 Biodiversity and Geological Conservation.

Similarly, the duty to have regard to biodiversity conservation under Section 40 of the Natural Environment and Rural Communities Act 2006 will ensure the need to conserve these habitats is taken into account when the Council is exercising relevant functions such as making relevant policies of planning decisions.

5.2 Mechanisms targeting the habitat

The following management and restoration actions are ongoing. They need to be supported and continued in addition to the action listed under Section 7.

▪ **Council work**

The Council is directly responsible for the management of over 200,000 trees throughout its various parks, open spaces, education grounds, housing estates, woodlands with up to 20,000 street trees. There are legal responsibilities associated with ownership of trees. The Council has a duty of care on the trees that it owns and hence seeks to be a responsible manager of this valuable resource

In view of the benefits that we receive from trees and the Council's responsibility for tree management and protection it is fitting for the Council to set out its approach to these issues, by producing a Tree Strategy. The purpose of this Strategy is to address fundamental issues by laying down the basis of management practices to ensure all those involved are working to a unified and common approach.

The strategy will include a number of policies which relate to the management of council owned trees and also privately owned protected trees.

▪ **Harrow Nature Conservation Forum volunteer wardens**

The following sites have volunteer wardens and management plans for these sites are in place and are being implemented, although some plans may need updating.

- Roxbourne Rough
- Bentley Old Vicarage
- Bentley Priory Nature Reserve
- Stanmore Common
- Stanmore Country Park

▪ **Trees and Woodland Framework for London**

The overall goal of the Framework is to provide a strategic approach to trees and woodlands that delivers the Mayor's vision for London and the relevant Mayoral Strategies within the context of the England Forestry Strategy. This includes the Right Place Right Tree initiative, ensuring that tree planting in London is appropriate.

6. Flagship Species

These special plants and animals are characteristic of woodland in Harrow

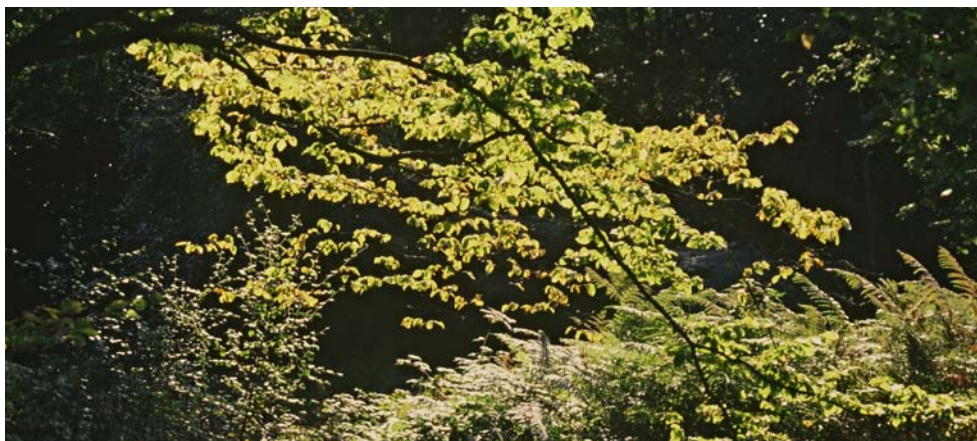
Credit Peter Wakely/Natural England



Hornbeam

Birds feed on its nuts

Credit Peter Wakely/Natural England



Aspen

The Latin name means trembling poplar. Because the leaves tremble in the breeze

Credit Paul Glendell/Natural England



Chaffinch

Is the UK's second commonest breeding bird, and is arguably the most colourful of the UK's finches. Is often seen in woodlands.

Credit: Helen Bantock



White Letter Hairstreak

This butterfly only breeds on Elm trees and as a result has decline significantly due to Dutch Elm Disease killing many Elm trees

7. Target and Actions

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.

Please note that the partners identified in the tables are those that have been identified 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.

Policy and Strategy

Target 1 To support managers of public spaces to manage sites for wildlife and public access by 2013

Action	Target Date	Lead	Other Partners
1. To develop and maintain links between HNCf wardens and Metropolitan Police Harrow Safer Neighbourhoods	2013	HNCf	Metropolitan Police Harrow Safer Neighbourhoods, LBH

Target 2 Incorporate Pear Wood and Stanmore Little Common into the suite of sites Harrow Nature Conservation Forum Wardens by 2008

Action	Target Date	Lead	Other Partners
1. Recruit one or more voluntary wardens to oversee Pear Wood and Stanmore Little Common under the umbrella of the Harrow Nature Conservation Forum. This warden would be expected to also take responsibility for council-owned open land up to the borders of Stanmore Country Park, and Wood Farm when all or part of that site is returned to public access.	2008	HNCf	LBH

Habitat Management and Creation

Target 1 Generate, review and/or update management plans for all publicly owned woodland and participating privately owned/leased woodland by 2013

Action	Target Date	Lead	Other Partners
1. Review management plans for all HNCf wardened sites and priorities those which need updating	2008	LBH HNCf	
2. Generate updated management plans for HNCf, according to the priorities identified in previous action. Update one management plan each year. This should include policies to maintain and enhance the populations of the four flagship species. Publish management plans for all HNCf sites on the HNCf website with links from the BAP website.	2008 2009 2010 2011 2012 2013	LBH HNCf	
3. Develop a management plan for Pear Wood and update as necessary.	2008	LBH HNCf	
4. Generation of management plan for the Old Redding Complex. The site includes areas known as: <ul style="list-style-type: none"> • The City Open Space • Harrow Weald Common • Grim's dyke Open Space • Weald Wood • Parish Field • Levels Wood 	2008	LBH	HWCC, HNCf, HNHS
5. Review management plans for all other council managed woodlands	2009	LBH	
6. Develop management plans for council managed woodlands, currently without a management plan	2011	LBH	
7. Develop a funding bid for implementing major management works to council managed woodlands	2010	LBH	
8. Create management plans for participating private sites: <ul style="list-style-type: none"> • Bentley Wood High School • Peterborough and St Margaret's School • St Dominic's Sixth Form College • Stanmore Golf Club • Pinner Hill Golf Club • Clementine and Churchill Hospital • Canons Park Estate Association 	2009	Land owners, LBH	
9. Create management plans for additional participating private sites as they join the process.	2008-2013	Land owners, LBH	

Target 2 To annually protect ground nesting birds from the affects of domestic animals

Action	Target Date	Lead	Other Partners
1. Formally survey the nesting bird populations in Stanmore Common and assess the impact of domestic cats from Bentley Grove	2009	HNCF	LBH
2. If a requirement is indicated by the above survey, erect a cat proof fence along the boundary between Stanmore Common and Bentley Grove.	2010	LBH	HNCF
3. Erect temporary signage on sites affected by domestic animal disturbance during bird nesting season	2008-2013	LBH	HNCF

Research and Monitoring

Target 1 Generate and make available to GIGL surveys of woodland in Harrow by 2012

Action	Target Date	Lead	Other Partners
1. Survey council owned land not within HNCF sites listing tree and other major species and aspects of each site that are of especial biodiversity importance, publishing the results on the Harrow BAP website.	2009	LBH	HNHS
2. If necessary obtain funding to perform next action	2008	LBH	HNCF
3. Survey invertebrate populations within woodlands. These surveys to be carried out by professional invertebrate ecologists and the results reported to GIGL and posted on the Harrow BAP website.		LBH	GIGL, HNHS
<ul style="list-style-type: none"> • Survey Harrow Weald Common • Survey Bentley Priory • Survey Stanmore Common • Survey Roxbourne Rough • Survey Stanmore Country Park 	2008 2009 2010 2011 2012		
4. Organise training in species identification and site assessment to wardens of HNCF sites and owners and managers of private woodland within Harrow.	2009	LBH	HNCF, HNHS
5. Generate information leaflet for owners and managers of private woodland within Harrow.	2010	LBH	HNHS
6. Add information from private woodland within Harrow to the BAP website, giving only that information the owners and managers of those sites are happy to make public	2008-2013	LBH	Schools, golf courses and other private landowners and leaseholders

Raising Awareness

Target 1 Creation of nature trails and explanatory leaflets by 2010

Action	Target Date	Lead	Other Partners
1. Design and create a nature trail for Bentley Wood High School	2008	Bentley Wood High School	LBH, HNCF
2. Design and create a nature trail for Peterborough and St Margaret's School	2008	Peterborough and St Margaret's School	LBH, HNCF
3. Obtain external funding for following action, if necessary	2009	LBH	
4. Design and create a nature trail within the Old Redding Complex	2010	HNHS	LBH, HWCC

Target 2 Increase awareness of woodland among landowners/leaseholders and the general public by 2011.

Action	Target Date	Lead	Other Partners
1. Obtain external funding for following actions, if necessary	2009	LBH	HNHS
2. Design, print and distribute an advisory leaflet on woodland management for private landowners/leaseholders	2010	LBH	HNHS
3. Design, print and distribute a leaflet describing common trees and woodland fauna for the general public and listing publicly accessible woods in Harrow	2011	LBH	HNHS

Target 3 Generate brief information sheets about the natural history of the flagship species, emphasising their presence in and importance in Harrow, and describing measures that will enhance their populations. Place the information on the BAP website by 2013.

Action	Target Date	Lead	Other Partners
1. Obtain external funding for following actions, if necessary	2009	LBH	
2. Design, print and distribute an information sheet about hornbeam	2010	HNHS	LBH
3. Design, print and distribute an information sheet about aspen	2011	HNHS	LBH
4. Design, print and distribute an information sheet about chaffinch	2012	HNHS	LBH
5. Design, print and distribute an information sheet about white letter hairstreak	2013	HNCF	LBH

8. Other Relevant Action Plans

Harrow Biodiversity Action Plan

- Grassland Habitat Action Plan
- Decaying Timber Habitat Action Plan
- Standing and Running Water Habitat Action Plan

London Biodiversity Action Plans

- Woodland Habitat Action Plan

Key References

Peterken, G. F. (1996): Natural Woodland: Ecology and conservation in northern temperate regions. Cambridge University Press, Cambridge, England.

Harris, E. and Harris, J. (1997): Wildlife conservation in managed woodlands and forests. Research Studies Press, Taunton, England.

Contact Details

Biodiversity Action Plan Officer
Harrow Council, Community & Environment,
3rd Floor,
P.O. Box 37,
Civic Centre,
Harrow
HA1 2UY
Tel 020 8736 6080
Email: ldf@harrow.gov.uk

Abbreviations

GIGL - Greenspace Information for Greater London
HNCF - Harrow Nature Conservation Forum
HNHS - Harrow Natural History Society
HWCC - Harrow Weald Common Conservators
LBH - London Borough of Harrow



1. Aims

- To develop a programme of bat monitoring
- To ensure that all past and current records of bats in the Borough are submitted to GIGL

2. Introduction

Bats are the only mammals which have evolved powered flight. It is the bones in the hand, which have evolved into a wing, enabling bats to fly, forming their own family the Chiroptera, which means 'hand-wing'.

Although bats are not blind, they have developed a complex echo-location system which allows them to detect features, avoid obstacles and locate food, such as insects in complete darkness. Bats produce a series of high pitched calls and by listening to the echo of these calls they are able to navigate. Bats prefer to fly along linear features, such as, hedgerows or tree lines, to ensure that they can continuously detect a feature and can use it to navigate to feeding areas. Since many of these high pitched calls cannot be heard by the human ear, bat detectors have been developed which convert these calls into an audible sound to the human ear. By using bat detectors it is possible to establish if bats are flying in an area and also identify the species of bat.

In Britain bats only eat insects, which they either catch in flight or pick off water, the ground or foliage. A single Pipistrelle bat can eat up to 3000 midges in a night. However, insects are not plentiful all year round, so bats hibernate in the winter. Bats fatten themselves in the autumn and then in the winter find a sheltered and undisturbed place to hibernate. During the winter their body temperature drops and their heart beat rate

reduces. Bats will still appear occasionally during the winter for intermittent feeding when the weather is mild.

During the summer, bats feed on insects at night and spend the day in their roosts. All bat species have a preferred type of roost. Some species are nearly always found roosting in buildings. Others use roosts in buildings only during the summer and hibernate in caves or mines, whilst others species roost in cracks in hollows or damaged trees throughout the year. A wide variety of buildings are used by bats ranging from historic to modern buildings. It is not uncommon to find bats roosting in houses.

All of London's Bat species are dealt with collectively in this plan because:

- Those currently concerned with the conservation of bats deal with all species
- All bat species and their roosts are equally protected by law
- The conservation problems faced by all bats are believed to be generally similar, so measures proposed here are likely to be of benefit to a number of species.

3. Current Status

Within Harrow the following bat species have been recorded; Common Pipistrelle, Soprano Pipistrelle, Noctule, Brown Long Eared bat and Natterer's bat. There are currently 10 of the 17 UK resident bat species recorded in London.

It is not possible from the records available to the Council to determine whether or not the bat population within Harrow is declining, increasing or remaining the same. However, it is thought that nationally bat populations are declining, although the results of the National Bat Monitoring Programme, organised by the Bat Conservation Trust have shown indications of increases in four bat species Daubenton's bat, Lesser Horseshoe bat, Common Pipistrelle and Natterer's bat. These increases are thought to be the result of greater public awareness of bats, the protection of more roosting sites and, improved agricultural practices. Unfortunately these increases are tiny compared to the overall decline in bat populations.

4. Specific Factors Affecting the Species

These are factors affecting the species currently either national, specifically in Harrow or both.

▪ **Loss of maternity roost sites in buildings and trees**

A lack of understanding of bats and the legislation that protects them can lead to actions which cause disturbance and damage to maternity roosts.

- **Loss of and disturbance to other roosting sites**

Hibernation and other seasonal roost sites can be disturbed or damaged for the same reasons as above.

- **Loss of feeding habitat**

Changes in land use and management can cause a loss in insect rich habitats. Wetlands, woodland and grassland are the main habitats associated with bat feeding habits.

- **Disturbance to commuting routes**

The linear features used to navigate to and from feeding areas can easily be lost, perhaps removed as a result of inappropriate management or development. Artificial lighting along linear features can also cause disturbance to bat commuting routes.

5. Current Action

5.1 Legal Status

All British bat species are given special protection within England by their inclusion on Schedule 2 of the Conservation (Natural Habitats & c.) Regulations 1994 and Schedule 5 of the Wildlife and Countryside Act 1981 (as amended).

As a result it is an offence under the legislation to: -

- Intentionally or deliberately kill, injure or capture (take) bats
- Deliberately disturb bats (whether in a roost or not)
- Damage, destroy or obstruct access to bat roosts (even when not in use by bats)
- Possess or transport a bat or any part of a bat, unless acquired legally
- Sell, barter or exchange bats or parts of bats

Bats are offered another level of protection, in that the Conservation (Natural Habitats & c.) Regulations 1994 require consultation with Natural England if development work is likely to affect bats. Natural England may request a licence be obtained to legally derogate from the legal protection given.

The Countryside and Rights of Way Act 2000 further extends the protection to cover reckless damage or disturbance to bat roosts and bats. Bat roosts are protected regardless of whether they are occupied by bats or not.

The general duty to have regard to biodiversity conservation under Section 40 of Natural Environment and Rural Communities Act 2006 will also apply.

5.2 Mechanisms targeting the species

The following management and restoration actions are ongoing. They need to be supported and continued in addition to the action listed under Section 6.

- **Greenspaces Information for Greater London**

Since 2006 Harrow Council has held a service level agreement with GIGL. The information, which GIGL provides is used to ascertain if planning applications, may impact upon bats.

- **Surveys**

Several informal survey sessions have been arranged by Harrow Nature Conservation Forum Wardens, to ascertain what species of bats are using the sites that they warden.

6. Targets and Actions

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.

Please note that the partners identified in the tables are those that have been identified 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.

Policy and Strategy

Target 1 To identify at an early stage planning applications which have the potential to impact upon bats and associated habitats by 2013

Action	Target Date	Lead	Other Partners
1. Adopt using the Association of Local Government Ecologist planning application validation checklists	2008	LBH	
2. Provide developers not performing mitigation work, with information about how bat friendly structures can be incorporated into developments	2008-2013	LBH	

Habitat Management and Creation

Target 1 To identify locations in association with suitable feeding habitats for installing bat boxes by 2013

Action	Target Date	Lead	Other Partners
1. Identify sites for roosting boxes	2010	LBH	HMBG
2. If necessary obtain external funding to purchase bat boxes or materials	2010	LBH	HMBG
3. Install 10 new boxes annually	2010-2013	LBH	HMBG

Advisory

Target 1 To provide advice to Planning Officers and applicants involved in schemes likely to impact upon local bat populations by 2008

Action	Target Date	Lead	Other Partners
1. Make the Natural England Planning Officers Guidance note available on the intranet	2008	LBH	
2. Make the Natural England Developers Guidance note available on the planning pages of the council's website	2008	LBH	
3. Compile a list of suitably qualified and experience bat surveyors to be given to applicants commissioning surveys	2008	LBH	

Target 2 To provide guidance to council employees and contractors and local businesses within Harrow whose work may bring them into contact with bats by 2010

Action	Target Date	Lead	Other Partners
1. Identify groups whose work may impact upon bats	2010	LBH	
2. Circulate suitable Bat Conservation Trust leaflets	2010	LBH	

Research & Monitoring

Target 1 Develop and implement a programme of bat monitoring involving local volunteers by 2013

Action	Target Date	Lead	Other Partners
1. If external funding is needed, submit a funding bid	2013	LBH	HMBG
2. Purchase monitoring equipment	2013	LBH	HMBG
3. Hold an event to recruit local volunteers	2013	HMBG	LBH
4. Develop a programme of training for volunteers	2013	HMBG	LBH
5. Train volunteers	2013	HMBG	LBH
6. Assign a site to each pair of volunteers	2013	HMBG	LBH
7. Volunteers to annually monitor site	2013	LBH	Bat volunteers, HMBG
8. Hold an annual event to celebrate the years recording work	2013	LBH	Bat volunteers, HMBG
9. Submit all records to GIGL	2013	LBH	Bat volunteers, HMBG
10. Continually publicise the project to recruit volunteers	2013	LBH	
11. Support one volunteer to become a licensed bat worker, if the desire exists	2013	HMBG	LBH

Target 2 To encourage holders of bat records, both past and present, to submit their records to GIGL by 2013

Action	Target Date	Lead	Other Partners
1. Develop links with members of the Herts and Middlesex Bat Group who hold records for Harrow	2008	LBH	HMBG
2. Encourage HMBG to become a data provider for GIGL	2008-2013	LBH	HMBG, GIGL
3. Encourage all consultants performing bat surveys as part of planning applications to submit their records to HMBG/LBG & GIGL	2008-2013	LBH	GIGL
4. Ensure all amateur sightings of bats are submitted to GIGL	2008-2013	LBH	GIGL

Target 3 Identify the locations of bat populations in the borough through surveying by 2013

Action	Target Date	Lead	Other Partners
1. Develop links with Golf course managers	2009	LBH	
2. Survey golf courses annually	2010-2013	HMBG	Bat volunteer surveyors, LBH
3. Perform a car survey annually	2008-2013	HMBG	LBH
4. Submit all records to GIGL	2009-2013	LBH	Bat volunteer surveyors, HMBG

Raising Awareness

Target 1 Increase public awareness of the importance of bats through led walks and other events by 2013

Action	Target Date	Lead	Other Partners
1. Deliver a led walk focusing on bats annually	Annually	LBG	LBH
2. Develop a 'Bats in Harrow Leaflet	2010	LBH	HMBG
3. Deliver a activity session for children focusing on bats	2010	LBH	HMBG

7. Other Relevant Action Plans

Harrow Biodiversity Action Plan

- Woodland Habitat Action Plan
- Rivers and Ponds Habitat Action Plan
- Grassland Habitat Action Plan

London Biodiversity Action Plans

- London Bat Species Action Plan

Contact Details

Biodiversity Action Plan Officer
Harrow Council, Community & Environment,
3rd Floor,
P.O. Box 37,
Civic Centre,
Harrow
HA1 2UY
Tel 020 8736 6080
Email: ldf@harrow.gov.uk

Abbreviations

GIGL - Greenspaces Information for Greater London
HMBG - Herts and Middlesex Bat Group
LBH - London Borough of Harrow
LBG - London Bat Group



1. Aims

- To develop a programme that secures appropriate management and protection of suitable habitat for the heath spotted orchid.
- To annually monitor the heath spotted orchid population.

2. Introduction

Most conservationists and land managers are aware that orchids are a delicate plant, requiring sensitive management. However it is possible that many people are unaware that these exotic looking plants grow naturally within the UK, instead associating orchids with exotic houseplants rather than native flora of this country.

The majority of the orchidacea family are perennial plants with fleshy roots or tubers and reproduce vegetatively (a process by which new plants are reproduced without production of seeds or spores). The plant flowers in its second year and dies down every winter before reappearing in the spring. However there are exceptions - some orchids are annuals

and die once they have flowered, these plants instead have fertile seeds which develop into plants.

Orchids can be found across the world, although many orchids are specific to a particular habitat. A limited number of orchid species are associated with heathland habitat. The heath spotted orchid is one of the few orchid species which favours acidic grassland or heathland sites which are boggy but not water logged. This orchid flourishes in the west and north west of Britain and similarly in the west and north of Ireland. It is less common in the Midlands and south east of England where it is becoming scarce (Lang 1980). Within London the Heath spotted orchid is considered to be rare and as a result is listed a "Species of Conservation Concern" for London.

3. Current Status

Harrow holds the only London population of the heath spotted orchid. In 1983, twelve flower spikes were recorded, however this dramatically increased to over 100 flower spikes in 1987. This colony is known to have been present since July 1980. However, prior to 1980 a colony had not been known on the site since 1900.

The Heath spotted orchid is renowned for its ability to hybridise with other orchid species, primarily the common spotted orchid. The hybrid is *Dactylorhiza x transiens*. The common spotted orchid is also found on same sites as the heath spotted orchid, although it is unclear if hybrid orchids have developed. Hybrids between the common and heath spotted orchid are known to be highly sterile, reproducing vegetatively (a process by which new plants are reproduced without production of seeds or spores).

The Harrow Nature Conservation Forum Warden, with the help from volunteers, annually counts the orchids.

4. Specific Factors Affecting the Species

These are factors affecting the species currently either national, specifically in Harrow or both.

▪ Disturbance to habitat

Since orchids are specific to a particular habitat, if that habitat is disturbed this can have a negative impact on the orchid population. Disturbance is usually a result of either inappropriate management, for example digging up an area or high levels of public access, which causes excessive trampling.

▪ **Succession**

Heathland is a sensitive habitat, if left unmanaged the process of ecological succession will result in the heathland developing into scrub, which will eventually turn into secondary woodland. It is essential that sensitive heathland sites are carefully managed to prohibit ecological succession. Because orchids have specific habitats requirements, any change in the habitat composition can cause orchid populations to be lost.

▪ **Site management**

Orchids are sensitive to management. For example, cutting grass too early can mean that orchids are cut whilst still in bud or before their seeds are dispersed, and this will deplete the orchid numbers for the following year. The use of fertilisers can increase competition from competitive grasses or cause the orchids to become over grown.

▪ **Hybridisation**

Hybrids between species will occur if two orchid species are in close proximity to each other and have compatible pollen. If the populations are separated by too great a distance, flower at very different times of the year or have incompatible pollen hybridisation will fail. (Lang 1980)

5. Current Action

5.1 Legal Status

The heath spotted orchid is listed as endangered “Red Data List” specie, and listed in Schedule 8 of the Wildlife and Countryside Act 1981 (as amended). Whilst it is illegal under the Wildlife and Countryside Act 1981 to intentionally uproot the plant without authorisation from the owner no further legal protection is offered.

Within London the Heath spotted orchid is offered an additional level of protection by virtue of being listed as a Specie of Conservation Concern due to it being rare in London and declining in the UK, specifically in the south east. It is also considered to be a plant which is culturally valued, although no specific legal protection is granted.

In addition the general duty to consider biodiversity conservation under the Natural Environment and Rural Communities Act 2006 may offer some degree of protection where the council exercises functions which have a bearing on the protection of this species, for instance when making policy or determining planning applications..

5.2 Mechanisms targeting the species

The following management and restoration actions are ongoing. They need to be supported and continued in addition to the action listed under Section 6.

▪ Annual orchid count

An annual count of the orchids is organised by the Harrow Nature Conservation Forum Warden. This is vital in order to establish any change in the orchid population.

▪ Management Regime

The London Ecology Unit produced the most recent management brief in 1994. Although no specific management prescriptions relate to the colony of heath spotted orchid, it is noted the disturbance to this plant must be avoided.

Since 2000/2001 the Harrow Nature Conservation Warden and volunteers have performed scrub and bracken clearance in the area colonised by the heath spotted orchid. During this period the numbers of orchids have declined. It is not known if this is a result of

- Natural orchid life cycle which can result in population fluctuations
- The affects of local hydrology on the orchid site
- Increase in damage to the orchids as a result of increased trampling caused by volunteers working in the orchid site.

6. Targets and Actions

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.

Please note that the partners identified in the tables are those that have been identified 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.

Habitat Management and Creation

Target 1 To develop and deliver a long term management programme that ensures the long term favourable management of the area colonised by the heath spotted orchid by 2009

Action	Target Date	Lead	Other Partners
1. Review existing management programme and its affect upon the orchid population.	2008	LBH	HNCF
2. Develop a management programme and incorporate into updated site management plan when produced.	2009	LBH	HNCF
3. Deliver management programme	2009-2013	LBH	HNCF
4. Review management programme if deemed necessary	2009-2013	LBH	HNCF

Heath Spotted Orchid Species Action Plan

Target 2 Restore the habitat to the south of Tyke's Brook to favour re-colonisation by the heath spotted orchid by 2013

Action	Target Date	Lead	Other Partners
1. To protect this area, divert the footpath away from this area, using adjacent footpaths or by creating a new route	2009	LBH	HNCF
2. Develop a management programme and incorporate into updated site management plan when produced.	2009	LBH	HNCF
3. Deliver management programme	2009-2013	HNCF	LBH
4. Review management programme if deemed necessary	2009-2013	LBH	HNCF

Target 3 In conjunction with the Heathland Habitat Action Plan develop a water level management plan for the site by 2011

Action	Target Date	Lead	Other Partners
1. Develop a methodology to monitor the hydrological aspects of the existing orchid area and area to be restored	Annually	HNCF	LBH
2. Obtain funding if development of a water level management plan, requires specialist services	2010	LBH	HNCF
3. Develop water level management plan	2011	LBH	HNCF
4. Deliver management programme, obtain funding if necessary	2011-2013	LBH	HNCF
5. Monitor the effect of the water level management plan on the orchid population and other important flora species for example betony, marsh thistle and marsh pennywort	2011-2013	HNCF	
6. Review water level management plan if deemed necessary	2011-2013	LBH	HNCF Site Wardens

Research and Monitoring

Target 1 Monitor on an annual basis the extent of the heath spotted orchid population, also assess the habitat quality of the area

Action	Target Date	Lead	Other Partners
1. Submit all past orchid records to GIGL	2008	HNCF	GIGL
2. Develop a simple methodology for surveying the habitat quality eg scrub cover, soil Ph	2008	HNCF, LBH	
3. Perform an annual count of the orchid population in the main area and area to be restored	2008-2013	HNCF	
4. Submit all records to GIGL	2008-2013	HNCF	GIGL

Target 2 Monitor and record the extent of hybridisation between the heath spotted orchid and common spotted orchid by 2011

Action	Target Date	Lead	Other Partners
1. If necessary obtain funding to cover cost of survey work	2010	LBH	HNCF
2. Perform a survey of the orchid areas, using a botany expert, to assess the proportion on orchids which are hybrids	2011	LBH	Botany expert,
3. Submit all records to GIGL	2011	LBH	Botany expert, GIGL

Raising Awareness

Target 1 Increase local knowledge of the heath spotted orchid by 2013

Action	Target Date	Lead	Other Partners
1. When appropriate, incorporate information about the heath spotted orchid into guided walks	2008-2013	HNCF	
2. If felt necessary, erect temporary signage on new fencing around orchid sites explaining the affects of trampling on ground flora	2008-2013	LBH	HNCF
3. Brief all volunteers and contractors working in the vicinity of the orchid areas about the affects of trampling on ground flora	2008-2013	HNCF, LBH	
4. Add a section about the heath spotted orchid to the acid grassland DVD, produced as part of the London Acid Grassland Habitat Action Plan	2008	LBH	
5. Circulate the acid grassland DVD to all schools and environmental groups.	2008	LBH	

7. Other Relevant Action Plans

Harrow Biodiversity Action Plan

- Heathland Habitat Action Plan
- Grassland Habitat Action Plan

London Biodiversity Action Plans

- Heathland Habitat Action Plan
- Acid Grassland Habitat Action Plan

Key References

LANG, D.(1980) Orchids of Britain. Oxford University Press.

Contact Details

Biodiversity Action Plan Officer
Harrow Council, Community & Environment,
3rd Floor,
P.O. Box 37,
Civic Centre,
Harrow
HA1 2UY
Tel 020 8736 6080
Email: ldf@harrow.gov.uk

Abbreviations

GIGL - Greenspace Information for Greater London
HNCF - Harrow Nature Conservation Forum
LBH - London Borough of Harrow

Copyright Steve Bolsover



1. Aims

- To promote wider awareness of reptiles and amphibians
- To collate all past records of reptiles and amphibians and develop an ongoing programme of monitoring
- Ensure that all sites known to support reptiles and/or amphibians are managed appropriately

2. Introduction

Amphibians and reptiles are collectively termed as herpetofauna. Although there are some significant difference between amphibian and reptiles, they are often grouped together for the purposes of research, monitoring and conservation work. Also due to their similar appearances, for example newts are often mistakenly identified as lizards and vice versa, it was decided that they would be dealt with together under a single action plan.

Within Britain native herpetofauna relates to the following species

Amphibians

- Common frog
- Common toad
- Great crested newt
- Natterjack toad
- Palmate newt
- Smooth newt

Reptiles

- Adder
- Common lizard
- Grass snake
- Sand lizard
- Slow-worm
- Smooth snake

Both amphibians and reptiles are cold blooded vertebrates. This means that they rely upon external sources of heat to warm their blood. Reptiles are often seen basking in sunny spots, for example in short vegetation or on top of log piles. Reptiles will also shelter underneath items such as pieces of carpet, roofing felt or corrugated iron, by doing so they are protected from predators and also able to maintain a constant body heat. Amphibians gain heat from burrowing in warm mud or sheltering in sunny positions at the edge of ponds.

Both amphibians and reptiles hibernate during the winter months. Amphibians usually hibernate under piles of damp leaves, rotting logs or in underground tunnels. Because frogs breathe through their skin, they occasionally hibernate within the mud at the bottom of ponds. Reptiles hibernate underground using disused mammal burrows, inside buried stonework, deep within grass tussocks or among tree roots.

When they emerge in spring time both amphibians and reptiles start migrating to their breeding grounds, frogs and toads are known to annually revisit the same pond for breeding. Toads are particularly loyal to breeding sites and often use the same migratory route year after year. Toads generally use larger ponds for breeding and are therefore less common in garden ponds compared to frogs. Frogs, newts and toads all lay their eggs in water. Newts lay their eggs singly, frog spawn is laid in a clump, whereas toad spawn is laid in a string.

3. Current Status

Within Harrow a wide variety of amphibians and reptiles have been observed. There have been a series of unconfirmed sightings of adders within the borough. It is common to confuse grass snakes with adders due to their similar appearance. These sightings need to be verified by an expert.

Based upon the habitats found with Harrow, the common amphibian and reptiles species which you would expect to find in association with these habitats, have been observed across the borough. However no records for great crested newts have been submitted to GIGL. It is thought that this is due to a lack of recording rather than this species not existing in the borough.

4. Specific Factors Affecting the Species

These are factors affecting the species currently either national, specifically in Harrow or both.

▪ Loss of habitat

The habitat requirements of amphibians and reptiles are specific and need to be managed accordingly. Pressure from development and poor management can cause habitats to be lost.

▪ **Stocking ponds with fish**

Predation by fish can be problematic to frog populations, as fish will readily eat tadpoles. They are less likely to eat the young of toads or newts.

▪ **Habitat isolation**

Habitats can easily become isolated, for example by the removal of a linking habitat or the creation physical barriers such as roads. An isolate population will quickly become vulnerable from in breeding, disease and predation.

Many amphibian species return to the same pond each year. Toads are especially well known for using the same route each year to return to their birth pond to breed. If these routes become intersected by roads, large numbers of toads can be killed when attempting to cross roads.

5. Current Action

5.1 Legal Status

All native species of amphibians and reptiles are offered protection under the Wildlife and Countryside Act 1981 (as amended), however the level of protection varies between species.

Great crested newts, natterjack toads, sand lizards and smooth snakes are given full protection under Section 9 of the Wildlife and Countryside Act 1981 (as amended) which prohibits the following: -

- intentionally killing, injuring or taking (capture. etc) and possession
- intentional disturbance whilst occupying a 'place used for shelter or protection' and destruction of these places
- the sale, barter, exchange, transporting for sale and advertising to sell or to buy.

Great crested newts are offered an additional level of protection, by being included within the Conservation (Natural Habitats & C.) Regulations 1994. Natural England must be consulted if work is required which is likely to affect great crested newts. Natural England may request that a licence is obtained to legally derogate from the legal protection given.

The common lizard, slow-worm, grass snake and adder are protected under the Wildlife and Countryside Act 1981 (as amended) against killing, injuring and sale.

The smooth and palmate newt, common frog and common toad are only protected against being sold under the Wildlife and Countryside Act 1981 (as amended).

In addition the general duty to have regard to biodiversity conservation under Section 40 of the Natural Environment and Rural Communities Act 2006 may offer further general protection where the exercise of functions by the Council has a bearing on protection of the species..

5.2 Mechanisms targeting the species

The following management and restoration actions are ongoing. They need to be supported and continued in addition to the action listed under Section 6.

- **Surveys as part of planning application**

Several surveys for reptiles have been included as part of planning applications.

- **GIGL**

Since 2006 Harrow Council has held a service level agreement with GIGL. The information, which GIGL provide is used to ascertain if planning applications, may impact upon amphibians or reptiles.

6. Targets and Actions

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.

Please note that the partners identified in the tables are those that have been identified 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.

Policy and Strategy

Target 1 To identify at an early stage, planning applications which have the potential to impact upon reptiles and amphibians by 2013

Action	Target Date	Lead	Other Partners
1. Adopt Association of Local Government Ecologists validation checklists	2008	LBH	
2. Provide training for planning administration staff and officers about the new system	2008	LBH	
3. Make validation checklist available on planning pages of the council's website	2008	LBH	
4. Monitor the use of the new system	2008 - 2013	LBH	
5. Provide developers not performing mitigation work, with information about how reptile and amphibian friendly habitats can be incorporated	2008 - 2013	LBH	

Habitat Management and Creation

Target 1 To assess the current condition of habitats, known or suspected to support reptiles and where necessary encourage land managers to adopt more appropriate management regimes by 2013

Action	Target Date	Lead	Other Partners
1. Using data from GIGL and local knowledge compile an inventory of sites	2009	LBH	Volunteers
2. Review the management regimes for all council managed sites and amend if necessary	2010	LBH	
3. Implement amended management regimes	2010 - 2013	LBH	
4. Contact owners of private sites thought to be of value to reptiles	2010	LBH	
5. Offer advice, if necessary, to improve the habitat for reptiles	2010	LBH	Private owners

Research and Monitoring

Target 1 To encourage holders reptile and amphibian records, both past and present, to submit their records to GIGL by 2008

Action	Target Date	Lead	Other Partners
1. Develop links with members of reptile and amphibian groups who hold records for Harrow	2008	LBH	
2. Encourage the above to submit data to GIGL	2008	LBH	GIGL
3. Encourage all consultants performing reptile surveys as part of planning applications to submit their records to GIGL	2008 - 2013	LBH	GIGL
4. Ensure all amateur sightings of reptiles and amphibians are submitted to GIGL	2008 - 2013	LBH	GIGL
5. Encourage people to take part in the National Amphibian and Reptile Recording Scheme and also share their records with GIGL	2008 - 2013	LBH	GIGL
6. Verify by an expert the status of the adder sightings	2008	LBH	

Target 2 Develop an ongoing programme to monitor Great Crested Newts by 2009

Action	Target Date	Lead	Other Partners
1. Develop links with the Herpetological Conservation Trust to deliver training to volunteers	2008	LBH	
2. Recruit volunteers to be trained	2008	LBH	
3. Organise a training day	2008 - 2013	LBH	
4. Assign a site to each pair of volunteers	2009	LBH	Private Land Owners
5. Volunteers to annually monitor site	2010 - 2013	LBH	Private Land Owners, volunteers
6. Hold an annual event to celebrate the years recording work	2010 - 2013	LBH	Volunteers
7. Submit all records to GIGL	2010 - 2013	LBH	Private Land Owners, volunteers and GIGL
8. Continually publicise the project to recruit volunteers	2008 - 2013	LBH	

Raising Awareness

Target 1 To promote awareness about the benefits of reptiles and amphibian by 2013

Action	Target Date	Lead	Other Partners
1. Devise a display to be used at public events	2008	LBH	
2. When developing interpretation panels for council owned sites known to support reptiles or amphibians include appropriate information	2008 - 2013	LBH	

7. Other Relevant Action Plans

Harrow Biodiversity Action Plan

- Standing and Running Water Habitat Action Plan
- Garden and Allotment Habitat Action Plan
- Grassland Habitat Action Plan

London Biodiversity Action Plans

- Reptiles Species Action Plan

Contact Details

Biodiversity Action Plan Officer
Harrow Council, Community & Environment,
3rd Floor,
P.O. Box 37,
Civic Centre,
Harrow
HA1 2UY
Tel 020 8736 6080
Email: ldf@harrow.gov.uk

Abbreviations

GIGL - Greenspace Information for Greater London
LBH - London Borough of Harrow

Copyright Steve Bolsover



1. Aims

- To ensure that management of the southern wood ant colonies maintains the population in the grounds of the Royal National Orthopaedic Hospital
- To ensure that management of the southern wood ant increases the population in Pear Wood

2. Introduction

Not many animals build structures large enough to be obvious even to a casual observer, yet the southern wood ant *Formica rufa* builds nests that can be taller than a child. In each nest live several hundred thousand worker ants. These workers are large, up to 1 cm long, with a handsome colouration of black and orange. They bear one of the few ant species that are indeed “full of formic acid”, which they can squirt when defending the nest. The acid can irritate human eyes, but is not dangerous.



3. Current Status

The colony of southern wood ants at Stanmore is the only one surviving in Middlesex and one of only two in Greater London, the other being at the opposite edge of the conurbation in Bexley. The nearest colony to the Stanmore one is in Burnham Beeches in Buckinghamshire. It is important to preserve not only because of its rarity, but also because it is such a prominent and distinctive animal. It dominates and modifies the area around its home in a way few animals other than man do. It is listed as 'Lower risk - near threatened' by the International Union for the Conservation of Nature.

Although it presumably originated as one group of neighbouring and interacting nests, the population at Stanmore has long been divided into two by Wood Lane. The population to the north, in the grounds of the Royal National Orthopaedic Hospital (RNOH), has one large stable home mound and a number of secondary mounds which do not remain in the same locations but rather are regularly moved by the ants within compartments CW1 and BW4.

4. Specific Factors Affecting the species

These are factors affecting the species currently either national, specifically in Harrow or both.

▪ Population size

The population in RNOH is likely to be as large as the relatively small patch of woodland can support, raising the possibility that part of the population might be removed to another location without long term effects on the population at this site. The aim of management of this population must be to maintain it in its present state of health by protecting and where possible improving the local environment. This will entail maintaining the woodland in compartments CW1 and BW4 open and of the form preferred by the ants.

▪ Habitat value

RNOH compartment SNG/SMW27 was until recently an island relict of the healthy vegetation found on the south of Wood Lane, but now is an ecologically uninteresting grass lawn. Returning this area to heathland or acid grassland would improve the environment for the ants.

▪ Disturbance

A particular problem arises with the largest RNOH nest, which surrounds an oak tree on the boundary between compartment SNG/SMW27 and the pedestrian pavement along Wood Lane. The nest is unmarked, since any marking would likely render it more liable to vandalism. It is safe in the short term but in the longer term is vulnerable to accidental damage by council workers or contractors who are unaware of its location and significance.

▪ **Population decline**

To the south of Wood Lane lies Pear Wood, an ancient woodland, within which are a number of open sunny glades whose margins would appear highly suitable for the southern wood ant. Nevertheless the colonies here have fared much less well. From 16 nests in 1975 the population is now reduced to one very small relict nest, which is unlikely to survive another year without human intervention. Management here can and must therefore be more proactive: since the population will die out if nothing is done we cannot afford to take risks if these offer a chance of preserving and enlarging it.

5. Current Action

5.1 Legal Status

No legal protection is given to the Southern wood ant.

However, the duty to consider biodiversity conservation under Section 40 of the Natural Environment and Rural Communities Act 2006 (taken together with this BAP) should ensure the role played by this species in local biodiversity is recognised and protection offered whenever relevant functions are exercised.

5.2 Mechanisms targeting the species

The following management and restoration actions are ongoing. They need to be supported and continued in addition to the action listed under Section 6.

▪ **Relocating a colony**

In the summer of 2007 a volunteer successfully relocated part of the large colony at the Royal National Orthopaedic Hospital to a location within Pear Wood.

▪ **Annual clearance of Grim's Dyke**

Annually the Council clear Grim's Dyke from vegetation. Although this work is needed to conserve the scheduled ancient monument, it also benefits the southern wood ants.

6. Target and Actions

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.

Please note that the partners identified in the tables are those that have been identified 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.

Policy and Strategy

Target 1 Establish extent of, and responsibility for Pear Wood by 2008.

Action	Target Date	Lead	Other Partners
1. Define the boundaries of the site that is to be protected and managed for southern wood ants	2008	LBH	
2. Recruit one or more voluntary wardens to oversee Pear Wood under the umbrella of the Harrow Nature Conservation Forum. This warden would be expected to also take responsibility for council-owned open land up to the borders of Stanmore Country Park including Scouts' and Guides' fields, and Wood Farm when all or part of that site is returned to public access.	2008	HNCF	LBH

Target 2 Protect the nest on the boundary of the RNOH and the pedestrian pavement of Wood Lane by 2010

Action	Target Date	Lead	Other Partners
1. Evaluate mechanisms and/or signage to ensure no council workers or contractors damage the nest	2008	LBH	
2. Implement mechanisms and/or signage to ensure no council workers or contractors damage the nest	2008	LBH	
3. Investigate the feasibility of moving or pushing back the nest so that it is fully within compartment SNG/SMW27	2008	Phil Attewell and/or other local naturalist	RNOH, LBH
4. Moving or pushing back the nest so that it is fully within compartment SNG/SMW27 if that is deemed safe and appropriate	2010	LBH	RNOH, Phil Attewell and/or other local naturalist

Habitat Management and Creation

Target 1 Maintain and improve the environment in the RNOH grounds by 2013

Action	Target Date	Lead	Other Partners
1. Maintain an open woodland structure in compartments CW1 and BW4	2008-2013	RNOH	LBH
2. Intervene to restore compartment SNG/SMW27 to heathland vegetation	2008-2013	RNOH	LBH

Target 2 Support and augment the population in Pear Wood by 2013

Action	Target Date	Lead	Other Partners
1. Maintain the vegetation around the nests optimal for the ants	2008-2013	HNCF LBH	LBH, HMWT, local naturalists
2. Transferring one or more nest mounds, with queens, from the RNOH site to Pear Wood, act if so decided	2008-2013	Phil Attewell	Steve Bolsover and/or other local naturalists, RNOH

Research and Monitoring

Target 1 Collect data on the population annually

Action	Target Date	Lead	Other Partners
1. Monitor the ant population	2008-2013	Phil Attewell	HNHS HNCF
2. Submit records to GIGL	2008-2013	Phil Attewell	GIGL
3. Develop links with Bexley Borough Council and the Corporation of London to compare management practices	2008	LBH	

7. Other Relevant Action Plans

Harrow Biodiversity Action Plan

- Woodland Habitat Action Plan

Key References

Attewell, P.J. (2005). The Last Wood Ants, *Formica rufa* L. (Hymenoptera: Formicidae) in Middlesex. Entomologist's Monthly Magazine 141: 32

Nash, Ogden (1942). The Face is Familiar. J.M. Dent and Sons, London.

Pontin, John (2005). Ants of Surrey. Surrey Wildlife Trust, Woking.

Contact Details

Stephen Bolsover, Chair, Harrow Nature Conservation Forum
40 Walton Drive
Harrow HA1 4XA
tel 020 8933 2823, 020 7679 6564
s.bolsover@ucl.ac.uk

Abbreviations

GIGL - Greenspace Information for Greater London

HMWT - Herts and Middlesex Wildlife Trust

HNCF - Harrow Nature Conservation Forum

HNHS - Harrow Natural History Society

LBH - London Borough of Harrow

RNOH - Royal National Orthopaedic Hospital

