1. INTRODUCTION

1.1 Biodiversity – A Vital Part of Ealing

There is a new vision for Ealing – a borough where the conservation of biodiversity is properly integrated with social, cultural and economic values. One where conservation of wildlife and habitats is regarded as a central issue, not as something, which can be sacrificed to meet other needs or be tacked on as an afterthought. This document is a contribution to that vision. It arises from the new agenda of biodiversity action planning, which is an attempt to redress the loss of habitats and their associated plants and animals, locally, nationally and worldwide.

1.2 What is Biodiversity?

Biodiversity is the 'variety of life' – the myriad plant and animal species and the range of habitats in which they live. Biodiversity is all life on the planet, from the insects in the grass of an African savannah, to the ubiquitous and familiar birds which inhabit Ealing's parks and open spaces; from the clusters of bacteria surrounding a geothermal vent at the bottom of the deepest ocean, to the frog finding refuge in a shallow garden pond in Southall.

1.3. A plan for the Borough of Ealing

The London Borough of Ealing (LBE) has a long history of interest and concern for wildlife. The Council's concern for nature conservation has increased greatly over the last two decades and the voluntary sector has also strengthened. Policies for nature conservation have been developed and structures have been successfully set up to promote conservation. But what has been lacking in LBE, and other boroughs, is a strategy linking the local and national needs of nature conservation. This document – the Biodiversity Plan for the Borough of Ealing – is the first step towards this goal. It covers the big issues, but also gives sufficient detail to be used as a basis for action. It is a working document for use by all those interested in conservation.

2. BIODIVERSITY AND THE BOROUGH OF EALING

2.1 Our Green Borough

2.1.1 The London Borough of Ealing covers some 5,550 hectares (over 21 square miles). About 16% of the total land area is green open space all of which can be considered of value for nature conservation.

Our borough contains a wide variety of wildlife habitats. Consider the range of woodland for example – from the well known ancient woodland of Perivale Wood, to the small pockets of recent woodland that have grown up in 'waste' places and along railway lines. Other habitats include grasslands, species rich

and amenity our waterways, the disturbed areas of 'wasteland', and the often unexpected wildlife havens provided by private gardens.

2.1.2 These habitats support a remarkable diversity of species. Most, like the hawfinch, bluebell and small blue butterfly, are remnants of native fauna and flora. Other species like the robin and common blue damselfly have adapted well to the human environment of parks and gardens. Our borough also supports some species that are urban 'specialists'. One of our rarer birds, the black redstart, can be found on sparsely vegetated industrial areas that mimic the scree-slopes and cliffs of their natural habitat further south in Europe. We also have some species, which are not urban specialists.

2.1.3 The legacy of London's trading history includes some plants that were accidentally or deliberately introduced. For example, the buddleia, which originated in China, is ubiquitous throughout London and contributes to maintain our native wildlife being a nectar source for insects.
For most of us it is the more common species which matter most: swans cruising along the canal; springtime carpets of bluebells; butterflies in the summertime meadows. A major objective of our action plan is to ensure that people who live and work in LBE are able to experience nature in their local environment. After all, it will be these people that will shape the future of our biodiversity.

2.2 Why Conserve our Wildlife?

Preservation of biodiversity is an international commitment. Our BAP is a direct result of the process initiated at the Earth Summit in Rio de Janeiro in 1992. Key environmental issues requiring international action were addressed and over 150 national governments, including the UK, signed the Convention on Biological Diversity as a commitment to helping avert the destruction of biodiversity. Article 6a of the Convention requires signatory countries to:- *' develop national policies or programmes for the conservation and sustainable use of biological diversity'*. The UK Government published a *UK Biodiversity Action Plan in January 1994.*

2.3 Sustainable Development

Preservation of Biodiversity is part of the even larger agenda of Sustainable Development.
The very word 'sustainable' means that those activities or trends can be sustained indefinitely. If habitats are being destroyed and species are becoming extinct, even at a slow rate in terms of % per annum, this is almost by definition not sustainable. We will live in a progressively impoverished world, which clearly does not meet the needs of future generations. It is thus self-evident that we must preserve habitats and species in Ealing. Loss of habitat and species from the Borough is not final, because habitats can be re-created (to some extent) and species can be re-introduced. However, this cannot and must be used as an excuse to allow us to avoid playing our part. This is a relatively rich and privileged part of the UK and is vastly so compared with most of the world. We therefore have a moral obligation to do more than the bare minimum needed to protect biodiversity locally.

3. BIODIVERSITY ACTION PLANS

3.1 At the Earth Summit in Rio De Janeiro in 1992, 150 nations signed the convention on Biological Diversity. It was recognised that human activities were changing and destroying wildlife habitats resulting in the alarming loss of species. For example in the UK over 100 species have been lost this century.

3.2 The UK Action Plan on Biodiversity was published by the Government in 1994. It set out the broad strategy and targets for conserving and enhancing wild species and habitats for the next 20 years. In 1995 the UK Biodiversity Steering Group published a report which made detailed proposals for a large number of species and habitats which require urgent conservation action. This report was endorsed by the Government in May 1996. and included the following set of priorities:

1. to increase the overall populations and natural ranges of native species, and the quality and range of wildlife habitats and ecosystems
2. to enhance internationally important and threatened species, habitats and ecosystems
3. to enhance species, habitats and natural and managed ecosystems that are characteristic of local areas.
4. to enhance the biodiversity of natural and semi-natural habitats where this has been lost over recent decades

3.3 The only way the UK Action plan will work, will be by developing effective action at a local level. Hence the need for a Biodiversity Action Plan for Ealing. We are taking this as the first step.

3.4 The UK Steering Group Report (1995) states: “Biodiversity (biological diversity) is all living things, from the tiny garden ant to the giant redwood tree. You will find biodiversity everywhere, in window boxes and wild woods, roadsides, rainforests, snow fields and sea shore”.

3.5 Biodiversity provides many of the essentials of life: our water, food, oxygen, health and relaxation. At a local level, biodiversity gives an area it's distinctive character and wildlife habitats make an important contribution to the quality of life.

3.6 Efforts have been made by the various agencies with nature conservation responsibilities to try and coordinate the action plan for London and to assist local authorities in the development of local plans. This has culminated in the creation of the London Biodiversity Partnership, which has a remit to coordinate the development of a Biodiversity Action Plan for London involving partners such as the former London Ecology Unit (now part of the Greater London Authority), English Nature and London wildlife Trust. Whilst the delay in this coordinated approach has led to delays in the development of local plans, responsibilities for developing London wide habitat action plans have now been defined

The new agenda. This action Plan has been developed through 4 topic groups.

1. The Project Plan Group, which secured funds for a London Biodiversity Project Officer and now oversee this post as a project board

2. The Promotion & Publicity Group to promote the partnership and approach others who would be interested in joining
3. The Data Recording Group which is currently synonymous with the London Wildlife Trust's Biological Project's advisory committee, this group aiming to establish a recording framework for London's biodiversity
4. The Habitats & Species Group whose principle aims are to provide an audit (review) of London's biodiviersity resource (habitats and species) based on recommended criteria, to evaluate the audit information and help prioritise the important elements of London's biodiversity and to produce action plans for priority habitats and species in the capital.

3.7 London has long been a pioneering arena for urban nature conservation. For many years, voluntary and statutory nature conservation, Local Authorities, locally based groups and individuals have argued successfully for the capital's wildlife. This has largely been achieved through the management of Sites of Importance for Nature Conservation and other open spaces. Protected areas such as nature reserves have been established, and are often managed in partnership between local authorities and private landowners. .

3.8 The new agenda will involve a wider audience in nature conservation. This new agenda will provide an opportunity for all people and organisations to take part.

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3.9 The Government endorsed the report of the UK Steering Group in 1996. In 1997, the
Steering Group, now called the UK Biodiversity Group, produced guidance notes for the production of local BAPs It was recognised from the outset that the success of the national document relied on production of local BAPs which detailed particular requirements of local biodiversity. Local BAPs are now recognised as an essential component in achieving success for wildlife on an international scale.

4. EALING'S BIODIVERSITY ACTION PLAN

4.1 The Ealing BAP was initiated by the Council in 1999 and a number of interested groups were brought together to establish a partnership and a BAP Steering Group,

4.2 The group's objectives are:

1. To establish an effective, committed and participatory partnership to conserve and enhance biodiversity in LBE.
2. To identify broad aims and objectives to ensure biodiversity conservation in LBE
3. To ensure that national and London targets for species and habitats specified in the UK Action Plan are translated into effective action at the LBE level
4. To identify the information required to effectively conserve LBE's wildlife and act to remedy deficiencies
5. To develop targets and action plans for the conservation of habitats and species that are of international, national, regional or local importance, or are of special

value to people living and working in LBE. The special circumstances that arise from LBE's urban character should be acknowledged
6. To promote access to and enjoyment of wildlife in LBE.
7. To resolve conflicts between nature conservation and other interests
8. To promote public awareness and interest in the wildlife of LBE, raise the profile of nature conservation and encourage people's involvement and personal commitment to the implementation of action plans
9. To publish the Ealing BAP and so establish priorities and action plans, incorporating a mechanism for monitoring and review.

4.3 Links with other local BAPs

The London Borough of Ealing is small geographical area and not a 'natural' bio geographical area. Therefore the Ealing BAP can not be delivered in isolation and where appropriate should relate to BAPs in neighbouring boroughs. Where these action plans have not been produced this will occur during the first major review of the BAP in 2005.

5. STRUCTURE AND PROCESS OF THE VISION

5.1 A number of groups and individuals have played a very active role in developing the Habitat and Species Action Plans. In addition a number of groups and organisations were involved in a partnership including Housing and Regeneration, Ealing and Hounslow Health Authority, London Wildlife trust (Ealing), the Selbourne Society, Ealing Wildlife Network (EWN) and the LA21 Natural Environment & Biodiversity Project Group.

5.2 Specifically, EWN produced the draft action plan for private gardens and both the West London Organic & Wildlife Gardening Association and the LA21 Allotments Group have contributed to the allotments action plan. Other groups have made further contributions including the Selbourne Society, who has developed a range of species action plans relating to fungi found within Perivale Wood.

5.3 This first draft of the action plan will be distributed to other internal and external organisations who have agreed to comment on Ealing's plan including the London Wildlife Trust, British Waterways, Countryside Agency, London Biodiversity Partnership, Greater London Authority (London Ecology Unit), Thames Water utilities and the Environment Agency.

5.4 Wider public consultation is a key part of the action plan and a series of summary leaflets will be produced to promote biodiversity issues within the Borough. The plan will need to engage the people of Ealing in order to ensure successful delivery of the actions. This process will start during the year 2001/2002. This may mean the plan needs to be amended during its first review. This process will take the form of workshops displays and leaflets on individual Habitat Action Plans and Species Action Plans organised or supported by the Parks and Countryside Service.

6. HABITATS AND SITES

6.1 Habitats

It is generally recognised that the best way to conserve species is by conserving the place where they live – the habitats. Other measures, such as preserving species in zoos, botanical gardens or research establishments are a last resort and are doomed to failure in the long run unless accompanied by plans to stabilise the status in the wild. Habitats are of course more than the sum of the species. The interaction of all the species and the abiotic environment mean that conservation of individual species is isolation can only be a poor substitute for conservation of habitats. And of course it is the whole habitat that is important to people and a primary amenity for the borough. A woodland in spring means far to people more than a mere collection of plants and animals that it contains.

6.2 Designated sites

A key feature of EBAP is to identify and protect all the relevant sites for nature conservation. Sites of Importance for Nature Conservation in London form a hierarchy of three categories identified by the London Ecology Unit: Sites of Metropolitan, Borough and Local Importance.

- Sites of Metropolitan Importance include all sites that already have a 'higher designation e.g. Site of Special Scientific Interest (SSSI) or National Nature Reserve. Other sites, which are significant on a London-wide basis, are also included. There are 5 such sites in LBE – Horsenden Hill, Perivale Wood, Islip Manor, Yeading Brook Fields and Gunnersbury Triangle.
- Sites of Borough Importance are important in a borough perspective. Loss of these sites or damage to them would mean a significant loss to the borough. The sites have been divided into two grades on the basis of their quality in terms of their wildlife and value to people. However LEU stresses that they are all important on a borough-wide basis. 17 sites of Grade 1 and 16 of Grade 2 status have been identified.
- A Site of Local Importance is one, which is or may be of particular value to local residents or schools. These sites may already be used by schools for nature study or run by management committees composed mainly of local people. Local sites are particularly important in areas of otherwise deficient in wildlife. 23 sites of Local Importance have been identified.

More than 1200 such sites have been identified in Greater London, covering an area of over 28,000 hectares

6.2.1 The LEU has identified a number of Countryside Conservation Areas where traditional forms of land-use have continued to present day. Wildlife Corridors have also been identified, these being relatively continuous areas of open space leading through the built environment which may link sites to each other and to Green Belt (or Metropolitan Open Land).

All the sites identified by LEU are listed in the publication *Nature Conservation in Ealing*, an attractive, illustrated book in which all the sites of Metropolitan, Borough and Local Importance are described. This book was published in 1991 and while it forms a very useful basis, it is by no means the last word. There may well be sites that were missed and the situation at the designated sites may well have changed or more information may now be available. The sites in the LEU should therefore reviewed and any extra sites added to the list. The sites should all be re-surveyed and it is recommended that a programme be established to do this. It is recognised that this is a considerable task and will therefore take a number of years. It could be carried out by the LEU (now the Bio diversity Group of the Strategy Directorate of the Greater London Authority) but there is sufficient expertise within the borough to carry out this work. In either case, the issue is resource –money and people.

6.2.2 The LBE has little Green Belt as such, because this is belt around London and LBE is not at the periphery. It does, however, have a good deal of land, which is designated, as Metropolitan Open Land (MOL). This designation is intended to prevent built development and has the same strength as Green Belt. Polices for MOL are described in OL1-3 of the Unitary Development Plan (UDP). The biggest area is the Brent River Park, which has its own policy OL6 in the UDP.

6.2.3 The Council has designated a number of "Green Corridors" in Policies OL5,6 of the UDP. These include the Grand Union Canal and 18 stretches of railway line (Table 2 in OL4). The Council has an extra designation – "Sites for Local Nature Conservation" (Policy OL21). 44 sites are listed in Table 6 in OL21).

6.3 Non-designated sites

It is a recurring theme in documents of government and the conservation organizations that nature cannot be adequately conserved just by preserving a number of special sites. The vast majority of our wildlife lies outside the designated sites – in parks, gardens, 'waste land', sports fields with their borders and edges, trees on streets, grounds of hospitals and schools and landscaped areas around public and commercial premises. To preserve biodiversity, we need to ensure that these are protected and enhanced. In some ways this is even more important to address these areas than the sites of recognized conservation value. The designated sites tend to be recognized as important and the needs of wildlife are generally taken into account, both when managing the land on a day-to-day basis and when proposing major changes such as change of use or building development. It is all the other areas, where wildlife is not a primary consideration, that conservation can so easily be ignored entirely. To some extent this has been recognized by LBE, which has designated the Sites for Local Nature Conservation, but even with these, much wildlife habitat will continue to lie outside any designated area.

6.4 The importance of preserving populations

The reason why we need to protect and enhance all wildlife areas follows from the basic concepts of biodiversity. The first objective of the Biodiversity

Steering Group report is a concise and powerful statement. It says the objective is " to increase the overall populations and natural ranges of native species, and the quality and range of wildlife habitats and ecosystems." Much of the conservation effort in recent years has gone into saving species that have become critically endangered and habitats that have become rare. The Costed Action Plans of English Nature, for instance, deal with these. However, this emphasis is because of resources. Given the severely limited funds available for conservation, priority has naturally been given to most threatened habitats and species. The need to conserve populations of the species that are, thankfully, still fairly common is well recognized. That is why there are lists such as the "red" and "amber" lists for birds, which list all the species where populations have declined in the last few decades.

6.4.1 If populations are allowed to decline, it might at first be thought that this does not have any implication for biodiversity as long as the species are nowhere near extinction. But this view does not hold up to critical analysis. The smaller a population is, the larger the chance that accidents, events or simply random fluctuations will cause the species to die out. In accordance with the "Precautionary Principle", we need to maintain populations that are easily big enough to guard against such 'accidental' extinction, not allow populations to become so small as to run the risk of extinction.

6.4.2 Another reason is one of genetic variation. All populations contain a range of genetic material. In the most extreme cases, distinct races, forms, varieties or sub-species area recognized. But even where these do not occur, there is a still a considerable range of genetic variation. If populations become too low, much of the variation disappears. At the biochemical level certain "alleles" – variants of genes – are lost. Even if the population subsequently recovers, genetic variation has been lost. The need to retain genetic variation was recognised in the Biodiversity Convention. An important consequence of loss of variation is that a species becomes less able to adapt and thus run an increasing risk of extinction.

6.4.3 A further reason why significant populations need to be preserved is because of dependencies. For example, a flower may have a population sufficient to safeguard it from extinction. But if a species of insect lives on that one type of flower and no other, that insect would probably need a much higher population of the flower to maintain a viable population of its own.

6.5 Maintaining areas of habitat

If we are to maintain, let alone increase, the populations of our wild plants and animals, it is almost axiomatic that we must preserve the amount of habitat that they live. It is not enough to just preserve examples of the various habitats – we need to preserve the area of habitat so that the populations of species can be maintained. Since there are many different types of habitat, each having its own particular species, we need to preserve areas of each type, not just the area of all types in total.

6.5.1 Because each type of habitat needs to be preserved, trading off one for another is not normally acceptable. For instance, cutting down a wood, which

reduces the extent of woodland habitat, is not justified by creating, say, grassland or ponds in the area. In the worst case it could lead to local extinction of a woodland species, e.g. crab apple, which is unlikely to be counterbalanced by a higher population of a common grassland plant such as daisy.

6.5.2 Although all habitats have their value and distinctive features, it is generally recognised that some are of more value then others. For example ancient woodland is more valuable than secondary woodland or scrub and pasture is better than close-mown turf. For this reason it may be desirable to convert one habitat into another. For example, converting close mown grassland to grazed meadow or planting with native trees is likely to lead to a net benefit. Caution must be exercised in applying this concept. If a particular habitat is rare locally or has some special feature (e.g. a rare species) converting it to another habitat, even if that new habitat is generally regarded as better, may not desirable. Even more care must be taken to avoid the argument that it is all right to destroy habitat because it is of "low value". The fact that such habitats are generally regarded as of lower value than some others does not mean they are of low, let alone no, value. Destroying a habitat such as mown grass still reduces biodiversity.

6.5.3 Often some form of "compensation" is offered when habitat is to be destroyed by a development. If for example a development is proposed which involves concreting over grassland, it may be proposed that as compensation, a pond will be dug and trees planted in the grassland, which remains. While this may be better than destroying the habitat and not doing any compensatory works, it nonetheless may reduce biodiversity. Compensation or amelioration does not make a development acceptable. Digging a pond and planting trees on the remaining grassland obviously reduces the area of grassland habitat and this, in conjunction with the land lost directly to the development is likely to lead to a net loss of biodiversity. It is also a truism that if the biodiversity could be improved by digging ponds and planting trees on some of the grassland without undertaking the development at all. The real challenge, as part of the sustainable development agenda, is too not to use open (green) land for new development at all. We should aim to use the existing built-up areas and brownfield sites more intensively, that is make more efficient use of resources that are not of value for biodiversity. We should be not be sprawling wastefully onto greenfield sites.

6.6 Critical Natural Capital

In some cases, habitat can be created relatively easily - for example mown grassland of the sort that is found throughout the borough in parks and sports fields. In such cases, preservation of any particular piece of land is not important (for biodiversity). One piece can be turned over to other use, if a similar area is created somewhere else. As long as the total extent is preserved, the main conservation objectives will be achieved.

6.6.1 For other habitats, this is not the case. Mature woodland, for instance, cannot be re-created. Even though trees will grow to virtually their full height in under 100 years, their lack of maturity and the absence of dead wood etc means the

woodland will not have a very diverse flora and fauna. In fact it takes many generations even of trees before a woodland obtains its full complement of species or biodiversity. (This is why the "ancient woodland" is recognized as a distinct and important habitat.) Therefore, for habitats such as ancient woodland one needs to preserve all the pieces of habitat that currently exist. Preservation of biodiversity will not achieved if old woodland is cut down and new woodland of a comparable area is planted.

6.6.2 This distinction has been encapsulated by English Nature and others in the concept of "Critical Natural Capital". Critical Natural Capital is that which, if destroyed, would lead to a long term or permanent loss of biodiversity.

6.6.3 In LBE the following habitats/sites should be considered as Critical Natural Capital:

Ancient woodlands	- Horsenden Hill Wood
	- Perivale Wood
	- Long Wood
	- Fox Wood
Old, unimproved pastures	- Horsenden Hill fields (various)
	- Perivale Wood pastures
	- Northolt Manor Fields
	- Islip Manor
	- Yeading Brook Fields
	- River Brent

This may not be a complete list. The list of areas of Critical Natural Capital should be reviewed as a priority.

6.7 Management of sites

In some cases, the best treatment for a habitat is simply to leave it alone – "non intervention". Management can be confined to protecting the site from damage (e.g. by maintaining fences round sensitive area), undoing any damage that has been done (e.g. clearing dumped rubbish) and by monitoring the site (to ensure that the regime of non-intervention is working). In many other cases, however, the wildlife interest can only be preserved or enhanced by active management. The reasons for this are considered below.

6.7.1 Some good wildlife habitats are 'semi-natural'. Unfertilised and unplanted grasslands, for instance, consist of wild grasses and other plants, which have established themselves naturally, but they only exist because the habitat is maintained by grazing or cutting them. Left to their own devices, they would revert to scrub. To keep an area as grassland and to maintain the biodiversity that has developed over the years, an active regime of management of grazing or cutting is needed. Likewise ponds are a semi-natural habitat which may need clearing or digging out.

6.7.2 Even for more natural or "climax" communities, active management may be needed. Depredations of the past, while not destroying the habitat, may have degraded it and active management is needed to restore the quality. Introduced non-native plants such as sycamore have invaded many woods and Himalayan balsam now covers considerable areas of riverbank.

Clearance of these may be desirable. Activities on the site or outside it may also have reduced the quality of the habitat. For instance interference with natural patterns of drainage is an almost universal feature of 'civilisation'. The usual aim is to enable water to drain away more easily, which has the effect of drying out habitats. Restoring more natural conditions by, for example by blocking drainage channels, digging pools, making scrapes and even directly controlling water levels may be desirable.

6.7.3 A further issue is that although patches of habitat may have been well-preserved, they are now isolated. Centuries ago, species would have come and gone, becoming locally extinct in particular areas. Because of the extent of habitats, it was always possible for the species in question to re-colonise. Now, because so good habitats survive only in patches, isolated by a 'desert' of buildings, re-colonisation may not happen. Isolated pieces of habitat tend to lose their complement of species over time; thus introductions or re-introduction of species may be desirable. A case in point is Perivale Wood. By the early part of the last century, primrose and wood anemone had become extinct. Because Perivale Wood is isolated from other woodland, there is no chance of natural re-colonisation, so it was decided to re-introduce these plants.

6.7.4 Habitats may also have changed due to a loss of a species, which has a major effect on the habitat. Centuries ago, the woodlands and scrub of LBE would have been grazed by deer and the ground would have been turned over by wild boar. It may not be practicable to re-introduce these animals, but one can simulate their effects by judicious clearance and by disturbing the ground. In some cases, re-introduction of the animals, or a substitute animal, is a realistic possibility. For example, the introduction of bison or ponies to graze the grassland and scrub of the Brent River Park is under consideration.

6.8 Management Plans

From the foregoing, it can be seen that there is a need to manage in some way virtually all sites, which are of value for nature conservation. To do this, it is necessary to have a "Management Plan" for each site. The Management Plan is important because its production enforces a discipline and rigour by requiring owners and other interested parties to think through and agree what is needed for nature conservation. A Management Plan provides the basis, but not necessarily the detail, for all management activity and it can also provide a convenient repository for information about the site and what has been done there.

6.8.1 Only a handful of sites in LBE have a Management Plan that is completed or drafted. This needs to be addressed as part of the habitat action plans. However, active management is taking place on many sites in the Borough where management is carried out using established practice for the habitat.

6.8.2 A concerted effort should be made develop Management Plans for at least all designated sites It is recognized that this quite a difficult and time-consuming task, so a short term priority should to review the status of plans for all sites. Another priority is to complete those plans which are already at draft stage.

Not only will this be valuable for the sites in question, it will facilitate the production of further plans. (For example once a Management Plan has been completed for one woodland, this will help authors write a plan for another woodland.) In the medium term, there should be a published plan for all designated sites.

6.8.3 It is not realistic to produce a detailed plan for all sites, especially where the site is small (e.g. a verge) or where conservation is not a primary aim of management (e.g. hospital grounds). In these cases, a concise statement of the management and the way it takes account of biodiversity should be prepared. This could include reference to a generic plan or regime (for example the general plan for roadside verges).

6.8.4 As well as being somewhat time-consuming, production of Management Plans can be daunting especially for those with limited experience or knowledge of ecology and conservation issues. To assist parties to produce management plans, funding should be sought so that outside advice and help can be brought in, either from within the borough or outside. To ensure consistency with EBAP and to provide further encouragement to landowners and managers to produce good plans, formal processes and procedures are needed. A committee should be set up with the remit of promoting Management Plans and ensuring they are consistent with EBAP. This could be a sub-committee or otherwise linked to the Open Spaces Advisory Committee or the Local Agenda 21 Biodiversity Group.

6.8.5 Management Plans describe the actions and at a site level, taking account of the particular circumstances of the site in question. However, to underpin such plans and maximise their contribution to biodiversity as a whole, a wider view needs to be taken. If, for example, a particular species is rare and endangered in LBE, London or the UK, it may be a policy to manage suitable sites to encourage the spread of that species or even introduce it. This would not be apparent if one took only a narrow, bottom-up, view of management at the site level. Also, absence of a wider view could lead to inconsistencies and counterproductive actions. If, for example, there were a policy to clear away birch scrub from one site but a policy of planting birch at another site nearby, seeds from the second site could invade the first site, undermining the plan.

6.8.6 A set of principle, policies and actions which apply across various sites are provided by “Habitat Action Plans” (HAP). Each HAP outlines the overall, objectives and approach for a particular type of habitat. A major part of this BAP consists of a set of HAPs, one for each of the major habitats, which occur, in LBE. Supplementing the HAPs, there is an “audit” of each habitat. This summarizes what is known about the extent and location of each habitat and the key species, which are present.

6.9 Actions linked to the Habitats of Ealing.

Short term (0-5 years)

1. Review the list of sites in the handbook Nature Conservation in Ealing, London Ecology Unit 1991.

2. Review Areas of Critical Natural Capital.

3. Review the status of site management plans. Explore the possibility that plans can be discussed at the Ealing Wildlife Network.

4. Review list of other important sites not listed in the Nature Conservation in Ealing handbook.

5. Complete management plans that have been started.

6. When the opportunity arises secure funding for the production of management plans.

Medium term (5-10 years)

7. Produce management plans for all sites of Metropolitan Importance.

8. Produce management statements for all other nature conservation sites.

6.10 Habitat Action Plans

Habitat Action Plans (HAPs) have been produced for the key habitats in Ealing. Much of the open land in the borough is managed by organisations, which may not have bio diversity as their number one priority. To engage these organisations and encourage them to manage their land in an environmentally sympathetic manner a number of Habitat Management Statements have also been produced. e.g. Railway Land. When these organisations are fully on board with the Ealing BAP process full HAPs maybe produced.

There are many actions, which are generic to all these plans in order to reduce the repetition in the plans these are listed here.

1. All the sites of importance listed in or identified through the Bio diversity Action Plan actions should be recognised and where possible protected through the Unitary Development Plan.

2. Monitoring of habitats. This is key to the development of management plans and where necessary the updating and amending of management plans. Monitoring systems should be set up when site management is started and management should be adjusted as required depending on the outcomes of the monitoring (See appendix 1).

3. Linked to the above recording of habitats and species is important and this should be carried out on key sites with the data being recorded on the London Wildlife Trust System.

4. Management Plans, many sites already have management plans or management is being continued in the traditional way. However, it is important that management is set down in a clear and concise manner. All

sites where management is going to be changed will require a management plan. All sites that are being managed need to have a management statement, which in time will be upgraded to a management plan (see appendix 1).

5. Many of the actions listed in the HAPs will cost money. Before any changes in management are carried out the site manager must identify resources to ensure that the proposed management and after care can be carried out properly.

6. Some changes in management may appear drastic to members of the public. Before any such management is carried out a community awareness strategy must be produced and implemented.

THE HABITAT ACTION PLANS PRODUCED ARE:

Acid Grassland

Allotments

Amenity Grassland

‘Education’ Land

Hedgerows

Neutral and Marshy Grassland

Ponds

Reed Beds

Rivers, Streams and Canals

Woodland (including Scrub).

THE HABITAT STATEMENTS PRODUCED ARE:

Arable Land

Health land

Private Gardens

Railway Land

ACID GRASSLAND

Acid grassland occurs on acid rocks such as sandstones and superficial deposits such as sand, gravel and peat. In Ealing all sites are on free-draining gravel substrates, often as patches in larger areas of neutral grassland. The characteristic indicator plants of these patches are sheep's sorrel and fescues. Harebell also occurs on at least one site.

1. CURRENT STATUS

1.1 IMPORTANCE

The current extent of acid grassland in the lowlands is not accurately known, but it is becoming increasingly rare in Britain. In Greater London there are just 1,200 hectares of acid grassland compared with 11,000 hectares of neutral grassland. Although in Ealing the habitat is fragmented and unlikely to be of national importance, these small fragments provide an important refuge for some calcifugous species of plants, which are otherwise not found in the Borough.

1.2 TRENDS

Lowland acid grassland is declining in extent nationally. The most serious losses were post-war, to agricultural intensification and forestry plantation. Formerly planting for commercial forestry has been targeted at this habitat but recent Forestry Commission policies have moved away from this.

Within London however, the main cause in the decline of acid grassland has been the continued expansion of suburbia and consequent demand on land for housing. In Ealing the area of acid grassland is probably now stable.

1.3 AREA

The area of acid grassland in Ealing is 2 hectares, 0.1% of London’s resource.

1.4 DISTRIBUTION

Sites are small and isolated and are found at Dormers Wells in Southall on the West Middlesex Golf Course, in Hanwell patches amongst neutral grassland at Well Meadow and Blackberry Corner, and on the upper slopes and top of Horsenden Hill. The West Middlesex Golf Course represents the best examples and harebell is present.

2. FACTORS AFFECTING THE HABITAT

1. Fragmentation, scarcity and isolation of remaining habitat.
2. Direct loss of habitat through intensification of usage or development.
3. Lack of management leading to spread of invasive plant and animal species.
4. Inappropriate management and damage to habitat from herbicide,

pesticide and fertiliser.

5. Reliance on rabbit populations to maintain the grazing pressure (and hence quality) of some sites.

3. CURRENT ACTION/ MECHANISM

3.1 PROTECTION

No sites have SSSI or SNCI designation. However Horsenden Hill is a Site of Metropolitan Importance. Blackberry Corner, Well Meadow and the West Middlesex Golf Course fall within the Brent River Park, a site of Borough Importance - Grade 1.

3.2 MANAGEMENT

It is vital to ensure that all sites are managed under regimes, which maintain grazing, or mowing pressure and without any spraying or the addition of fertiliser or other nutrients. This form of management is being pioneered through the West Middlesex Golf Course management plan.

4. SPECIES

Notables
Harebell (indicator, and in decline) and sand spurry, both found on the West Middlesex Golf Course**.** Meadow pipit and linnet (in decline and priority Species). common lizard (in decline).

Standard Bearers/Quality Indicator Species
Bent grass, sheep's sorrel (in decline) and sheep's fescue are typical. Other characteristic plants include lady's bedstraw, heath bedstraw (in decline), burnet saxifrage, tormentil (in decline) and broom. Green woodpecker (species of conservation concern).

Retrievable
Green hairstreak (rare and in decline).

5. OBJECTIVES

1. Continue cropping or grazing the Countryside Stewardship sites in Hanwell.
2. Ensure appropriate management of the patches on the West Middlesex Golf Course is continued under the new lease, and that for example harebells are allowed to flower through on as large an area as possible.
3. The distribution of key species should be mapped from time to time as a measure of whether or not management is successful. Any Species Action Plans relevant to Acid Grassland are implemented.

6. TARGETS

Short term targets (0 - 5 years)

2.1. To maintain the current area of acid grassland in the Borough, through increasing landowners/managers awareness of the importance of these areas.
Also ensure that all known areas receive protection via Unitary Development Plan designation.

1.1. To secure positive management of all remaining acid grassland sites.

2.2. Present target to secure appropriate management of the acid grassland on the West Middlesex Golf Course through the new lease.

3.1. To instigate monitoring of key species and habitat management.

3.2. Incorporate specific targets from any relevant Species Action Plans in the management of acid grass land. Target: Species Statement produced for the green hairstreak butterfly.

Medium term targets (5 – 10 years)

1.2. To attempt to slightly increase by (10%) the patches present in neutral grassland hay meadows by continued cropping or grazing under the Countryside Stewardship programme.

Long term targets (10 – 50 years)

1.3. To maintain or increase the number of calcicolous plant species found in Ealing.

2.3. To integrate the conservation of nature and historic landscape with the development of leisure pursuits and environmental education. This will be achieved using the experience gained from the West Middlesex Golf Course management plan as an example of best practise.

7. RESPONSIBLE BODIES

London Borough of Ealing (LBE) owns all known sites, including the West Middlesex Golf Course, which is leased to the West Middlesex Club. The Greater London Authority (GLA).

8. COMPLEMENTARY PLANS

A UK action plan for lowland dry acid grassland is in preparation. (No lead body has been agreed as yet.) There is also a broad Habitat Statement for Acid Grassland.

The London Biodiversity Action Plan, various habitat and species action plans.

The West Middlesex Golf Course Management Plan.

ALLOTMENTS

By definition, an allotment garden is an area of land wholly or mainly cultivated by the occupier for the production of fruit or vegetables for consumption by the gardener and family.

1. CURRENT STATUS

1.1. IMPORTANCE

Allotments provide a safe and attractive environment for plotholders to grow plants, fruit and flowers. Covering around 40 hectares of land within the borough, they provide shelter havens for a range of wildlife including hedgehogs, robins and thrushes. Allotments range from important wildlife havens to carefully managed traditional vegetable patches. It should not be forgotten that allotments provide a range of microhabitats such as compost bins and ponds that complement formal nature conservation areas by providing a year-round supply of food. The variety of seeds, vegetables, fruits and berries available is unrivalled and rich, open soil yields a wealth of insects for predators. In addition, allotments support migrant wildlife, by providing resting, feeding and breeding places and important links to other nature conservation areas and green corridors.

1.2 TRENDS

The Government believe the loss of allotment land is due largely to the decrease in demand for allotments since their peak for food supply during the Second World War. On a local level, over half the current allotment sites are well used, with 80% or over let. Demand for plots is higher in some areas such e.g. Acton, where the number of sites is relatively low in relation to population density. In addition a number of private sites were lost in 1999 due to a private leisure development.

1.3 AREA

The total area covered by allotments in Ealing is approximately 37.43 hectares. There are 65 sites currently used for allotments with at least 4 small vacant sites, which were last used for this purpose. 46 are managed by the Council and 23 by charities or allotment associations.

1.4 DISTRIBUTION

The distribution of allotments in Ealing is uneven, with a shortage in Acton. In Greenford, sites are more numerous.

2. FACTORS AFFECTING ALLOTMENTS

1. The development of allotment land for non open spaces uses is a potential threat although allotment land is protected by designation as part of the UDP.

2. Spread of invasive plant and animal species such as couch grass and bramble, whilst potentially beneficial for biodiversity, effectively reduce the amount of usable allotment land. This establishes a cycle of reduced usage and cultivation which in turn reduces the vitality of the allotment.

3. Disturbance due to visitor pressure?

4. Use of slug pellets which also poison hedgehogs etc and use of pesticides/herbicides and toxic wood preservatives. The use of herbicide may be considered by some as a necessary evil for the control of couch grass!

5. The lack of awareness of biodiversity and the benefits of it and possibly the perception that certain species of flora and fauna are a pest.

6. Possible lack of education and therefore good practice in terms of recycling, air and soil pollution from fires (See Environmental Protection Act 1990) and water preservation.

7. The relative lack of resources available for allotment maintenance and improvement (in comparison to other priorities).

8. Lack of directly available grants for projects to improve allotments.

3. CURRENT ACTION

3.1 PROTECTION

As stated in Ealing's Development Plan (UDP), the Council will safeguard established sites for allotments having regard to the legal requirements for their provision and the constraints on disposal. Where allotments are no longer fully used the Council will encourage the provision of facilities to attract different sections of the community.

The Council, in partnership with a range of organisations has developed a Sustainable Allotment Strategy with a series of short, medium and long-term targets. There is a commitment to developing an Allotment Partnership to oversee improvements and the move towards 'self management' at certain sites. The development of such a partnership is a key target within the Council's Best Value Performance Plan for 2000/2001. A key part of the strategy is to promote allotments, which will increase usage and therefore protection.

3.2 MANAGEMENT

At present, all allotment sites have been classified in terms of percentage of use, ranging from A (80% or over let) to B (50 - 79% let) to C (under 50% - to be considered for alternative open space use after sustained publicity over 1999 -2000) to D (Sites where transfer of land has already been agreed to public open space and a separate nature reserve). **Refer to Sustainable Allotment Strategy 1999 for details of individual sites.** It is envisaged that the Allotment Partnership will seek funding for and contribute to

improvements, eventually gaining charitable status. In addition the Council is committed to encouraging the 'self management' of sites to provide the opportunity for plot holders to have more involvement and utilise their own expertise.

4. SPECIES

Standard Bearers/Quality Indicator Species
Hedgehogs, field mice, foxes, bees, slow worms, newts, frogs, toads lepidoptera, lacewings, dragonflies / damselflies, a range of birds including robin, thrush, goldfinch, blackbird, kestrel, sparrowhawk,

(Positive)
Hedge species (hawthorn, blackthorn, hazel, dog rose, holly, oak, ivy, birch, beech, bramble (as a food source)
(Negative)
Sycamore, (Allotment perspective), bramble (encroachment), exotics (invasives)

5. POLICY

5.1 MONITORING AND RESEARCH

As part of the development of the Sustainable Allotments Strategy Monitoring and research was carried out by surveying plot managers and distributing questionnaires to plot holders. The researched focussed primarily on allotments, their management and improvement rather than biodiversity issues.

5.2 FUNDING

Allotments are funded by the fees of plot holders but extra costs are covered by the Council, such as fencing, repairs etc. The Allotment Partnership which will have charitable status so that the Partnership can raise and distribute funds for improvement.

5.3 EDUCATION

Allotments offer scope for education and school involvement in food growing initiatives. Allotments are used for demonstrations of organic methods of gardening, as well as composting.

Generally, it is necessary to increase awareness of the issues raised in part 2 above through leaflets, displays and examples of good practice. However, the work of the various allotments associations, horticultural societies and other organisations such as WLOWGA and EWN should be recognised. In 2000 an LA21 Allotment Group was formed by a plot holder which produces a regular newsletter and promotes a website which can be found at www.allotments.org The general promotion of allotments is a key target of the strategy

5.4. OBJECTIVES

1. To establish any key species which may need protection and enhancement on allotment sites, as well as increasing biodiversity where suitable

2. To seek to increase the amount of allotment land especially within the Acton area as a more biological diverse land use when compared to amenity grassland.

3. To encourage the wildlife friendly plots

4. To promote safe deterrents against crop predators.

5. To encourage the use of organic feeds for plants, especially 'green manures' such as vetches and comfrey

6. To discourage the use of herbicides, pesticides (including slug pellets) and chemicals within allotments

7. To encourage the development of rare seed clubs and to seek to ban genetically modified seeds?

8. To reduce the use of tap water through education with regard to the use of water butts and mulches

9. To support recycling and composting by increasing amount of subsided composting bins for allotments

10. To secure and protect present number of allotment sites, consider new sites suitable for allotment allocation and reallocate unsuitable land for alternative open space use.

11. To increase areas of native (prickly) hedge around sites to provide wildlife corridors and barriers for security and noise/vandalism.

12. To improve disabled access to key sites.

13. To promote allotments and increase awareness of the value of allotments for biodiversity.

6. TARGETS

Short term targets (**0 - 5 years)**

1.1 Identify key indicator species to monitor biodiversity on a repeatable basis (5 yearly?)

1.2 Create 3 wildlife ponds - one in each area of the borough by 2004

1.3 Identify wildlife zones within allotment sites where appropriate, native invasive species can be allowed to thrive. NB the control of couch grass without using herbicide will be required for cultivation of plots. (Biodiversity Target)

A1 To actively control scrub where encroaching on to allotment plots, esp bramble on an as and when required basis. (Allotment target)

3.1 Promote awareness of sustainable management of allotments and organic gardening e.g. Henry Doubleday Research Association leaflets, training days to reduce chemical use and promote recycling, composting and water conservation. (Allotment & Biodiversity target)

3.2 Promote organic gardening e.g. planting of nettlebeds, wildflowers, bramble in specific areas to increase food source for insects and birds etc.(Biodiversity target)

A2 Set up an Allotment Partnership to seek further funding for renovation of sites. (Allotment target)

A3 To encourage self management of well used allotment sites to increase revenue and secure future of site (Allotment target)

A4 Ensure that at least one site is self managing by March 2002 (Allotment target)

10.1 Separate unused land to enable appropriate management e.g. Brent River Park. (Biodiversity target)

10.2 Redefine boundaries of any allotments classified as D and convert to alternative open space use e.g. Dormers Wells and Wolf Fields Southall, Oldfield Northolt, Pitshangar W13.

11.1 Identify the 5 most vulnerable sites in the borough and encourage thorny hedge planting on these sites where lack of shelter and vandalism are a problem. Biodiversity and Allotment target)

11.2 Identify funding source for these hedges and encourage plotholders/managers to involve the local community and BTCV? (Allotment & Biodiversity target)

13.1 Organise publicity programme promoting allotment use. (Allotment & Biodiversity target)

Medium term targets (**5 - 10 years)**

9.2 Seek funding for and establish composting schemes on all feasible sites
1.3 Provide a forum for consultation on alternative uses on vacant or underused allotments following careful monitoring and publicity

12.1 Identify most suitable sites for disabled access and make necessary modifications.

Long term targets (10 - 50 years)

13.2 To promote sustainable management of allotment sites

A5 To increase overall levels of occupancy to over 90% at all sites**.**

A6 Partnership with interested parties still in existence - consultation to maintain a balance between cultivation of sites and areas set-aside for wildlife still happening.

7. RESPONSIBLE BODIES

LBE, Allotment Partnership, EWN, EAGs, various Horticultural societies, plot managers and local charities managing sites, local residents, HDRA, National Society of Allotments and Leisure Gardens, LA21 Project Groups West London Organic & wildlife Gardening Association, London Wildlife Trust.

8. COMPLEMENTARY PLANS

DETR intend to promote greater use of allotments.

AMENITY GRASSLAND

Ealing has many amenity grassland sites (including formal parks, golf courses, sports pitches, recreation areas and commons). The Amenity Grassland plan looks at all features on sites that are Public Open Space and have been set a side for community use.

1. CURRENT STATUS

1.1 IMPORTANCE

Amenity grassland is a potentially valuable habitat due to the vast area it occupies. By de-formalising / softening sports pitches and other recreation areas, many habitats could be created and new wildlife corridors established.

1.2 TRENDS

The Parks and Countryside Service are considering nature conservation in the management of amenity grassland sites, such as formal parks and sports pitches where it does not have an adverse impact on the primary use of the site.

1.3 AREA & DISTRIBUTION

Amenity grassland sites are distributed throughout the Borough and occupy nearly 300 hectares. In addition to the sports pitches and formal parks within the borough, many sites occur within housing estates.

2. FACTORS AFFECTING THE HABITATS

1. The value of amenity grassland in terms of nature conservation is rarely recognised. Consequently the threat of building on Public Open Space (POS) is always present, as the demand for housing is ever increasing. This threat is greatest to areas of amenity grassland within housing estates. Any loss of POS is likely to have a detrimental effect on wildlife.

2. Loss of ecologically valuable trees bordering sites, as they die or are damaged by gales. These trees are felled for safety reasons due to their close proximity to public Rights of Way.

3. Sites in well-populated areas are heavily used and can be prone to littering, vandalism and faecal matter (dogs and pigeons).

4. Erosion on some heavily used sites can occur. This may be in the form of over-use on sports pitches e.g. Football on sodden pitches or desire line paths across sites

5. Replacement of grass sports pitches with artificial, all- weather surfaces.

6. Reduction of amenity grassland at the expense of more wildlife rich

habitats - this is a commitment by the Council. (See Current Action / Mechanism).

3. CURRENT ACTION

3.1 PROTECTION

The main protective mechanism for POS is through the UDP which states that there will be a 'no loss' policy.

3.2 MANAGEMENT

At present many amenity grassland sites are managed intensively. However, the Parks and Countryside Service has begun to de-formalise some sites by planting hedges or allowing strips of grassland to grow long. The P & C Service has committed itself to ensuring that planning officers are aware that all open space has a nature conservation value, simply because it is green open space.

4. KEY SPECIES

Standard Bearers/Quality Indicator Species
Song thrush, mistle thrush, kestrel, sparrow hawk, fieldmouse, bats, oak, field maple, London plane

(Positive)
Hedgehog, fox, blackbird

(Negative)
Pigeon, magpie, grey squirrel, sycamore

OBJECTIVES

1. To preserve the areas of land, identified as P.O.S.

2. To introduce management techniques beneficial to nature conservation on amenity grassland sites.

3. To consult with relevant bodies regarding management and development of sites.

4. To introduce measures to improve the amenity and recreational value of sites.

5. TARGETS

Short term targets (0 -5 years)

1.1 To survey all land in the Borough and identify any 'forgotten' areas of amenity grassland.

1.2 To ensure ‘no loss’ policy for POS (as identified in the UDP) is adhered to.

2.1 Produce costed, objective based management proposals for 10 sites per year. Incorporate these into annual work plans and ensure new maintenance schedules are included in the grounds maintenance contracts.

2.1 Review of mowing regimes in formal parks and around perimeters of sports pitches, thus allowing potential development of ‘meadow’ areas and strips.

2.2 Planting of hedges to be implemented at appropriate locations. Any trees and shrubs planted are to be of local, native species where appropriate in accordance with the Borough Tree Strategy.

2.3 Tree Preservation Orders to be strictly enforced.

2.4 Strict control over the use of pesticides, environmentally friendly control methods will be used whenever appropriate.

3.1 Establish Project Group involving representatives from Contract Managers, Housing Department, Residents Associations, ‘Friends Of’ groups, Private Sports Clubs, LWT etc.

4.1 Enforcement of relevant by-laws e.g. Issuing of fixed penalty litter and dog tickets.

4.2 Close monitoring of performance of contractors undertaking grounds maintenance duties, thus ensuring performance is to a high standard.

4.3 Conduct basic tree audit at all sites and develop a strategy for replacement of dead/dying trees.

Medium term targets (5 -10 years)

1.3 Continue ‘no loss’ policy for POS (as identified in the UDP).

2.5 Maintain existing wildlife areas on amenity grassland sites (including sports pitches, formal parks, children’s play areas etc).

3.2 Regular meetings of Project Group involving representatives from Contract Managers, Housing Department, Residents Associations, ‘Friends Of’ groups, Private Sports Clubs, LWT etc.

4.4 Enforcement of relevant by-laws e.g. Issuing of fixed penalty litter and dog tickets.

4.5 Continued close monitoring of performance of contractors undertaking grounds maintenance duties, thus ensuring performance is to a high standard.

4.6 Re-evaluation of contracts prior to re-tendering.

Long term targets (10 - 50 years)

1.4 Continue ‘no loss’ policy for POS (as identified in the UDP).

7. RESPONSIBLE BODIES

LBE, Local Residents, LWT, GLA, Landowners,

8. COMPLEMENTARY UK PLANS

Ealing Unitary Development Plan, National Forest Strategy, BS 7750.

‘EDUCATION’ LAND

This refers to the parcels of land owned or managed by schools, colleges or universities. Mostly it is managed as mown grassland and used for sports facilities, but there are often ornamental areas close to school entrances, and many schools now have wildlife areas.

1. CURRENT STATUS

1.1 IMPORTANCE

The importance of land used by educational bodies lies mostly in their use for children and students as areas for sports and play. However, the areas of land are now often being used partly as areas where aspects of the National Curriculum can be studied or where projects can be carried out. The setting up of wildlife areas in school grounds is often a result of a combination of two factors - easy availability of an area for nature study and awareness of national concerns about the disappearance of wildlife and wildlife habitats. School grounds also provide a great opportunity for multi-cultural gardens.

1.2 TRENDS

No specific data is available on school land although there is probably a trend towards more informal playgrounds and more soft landscaping rather than hard landscaping. There is an increasing awareness of the benefits of a ‘greener’ playground and various organisations are promoting this e.g. Learning Through Landscapes (LTL) has a target to ensure there are no schools with only asphalt playgrounds. Secondary schools have often consolidated on one site, leaving vacant sites to be developed for housing. However, there is no data to show the extent of this in Ealing.

1.3 DISTRIBUTION

Land holdings are distributed fairly evenly over the well-populated parts of the Borough.

2. CURRENT FACTORS AFFECTING SCHOOL AND COLLEGE GROUNDS

- Pressure from daily use by children
- Dual purpose of grounds for sport, recreation and wildlife
- Financial and OFSTED non- priority
- Pressure for development
- Off street car parking

3. CURRENT ACTION

3.1 PROTECTION

As a habitat, school grounds are not afforded any protection but there is obvious pressure from parents and students for schools and colleges to have

at least a minimum amount of land available for sports use and play. The following schools have parts of their sites designated as SLNC (Sites of Local Nature Conservation):
Walford High School nature area
Brentside High School nature area
Cavendish School wilderness area.
Some schools may have TPOs (tree preservation orders) for some trees.

3.2 MANAGEMENT

Secondary school and college grounds are often maintained as close-mown grassland to provide facilities for sports, and much of this land needs to continue to be maintained in this fashion. Primary schools are often able to provide greater variety in their management because of the lesser emphasis on sports, whereas secondary schools tend to provide less space for wildlife and more for sport. Some habitats are not appropriate for schools, for example deep ponds, thorny hedges or poisonous berry bearing species such as yew and deadly nightshade. Currently there seems to be a trend for council schools to opt out of grounds maintenance contracts to self-management.

4.1 MONITORING AND RESEARCH

There is scope for schools to be involved in monitoring and researching their own individual grounds. There is also potential for cross-curricular studies.

4.2 FUNDING

Grants and funding are available for school ground development, especially where community involvement and long term benefits are obvious. Companies such as BT, London Electricity, SHELL and VOLVO fund many school projects. Learning Through Landscapes can be consulted about available grants.

4.3 EDUCATION

Obviously the involvement of the pupils, staff, governors and parents of the school will involve education at all levels. School grounds development has many cross-curricular links to the National Curriculum.

5. OBJECTIVES

1. To promote and educate people about the benefits of increasing biodiversity.
2. To create a healthier atmosphere for children in school grounds.
3. Diversification of wildlife habitats.
4. To preserve as much school ground as possible free from development.

6. TARGETS

Short term targets (0-5 years)

3.3 The Parks and Countryside Service have produced a pack on Improving Your School Grounds for Children and Wildlife and will deliver at least 3 INSET (In Service Training) sessions to schools annually on this.

3.4 The Parks and Countryside Service will arrange at least 2 environmental project weeks available for all schools annually.

3.5 A Wildlife WATCH group for 7 - 14 year olds has been set up and will be maintained.

3.6 A student placement pack will be produced and at least 3 placements per year will work with the Parks and Countryside Service.

2.1 Work with Learning Through Landscapes in Ealing schools to ensure an increase in soft landscaping.

3.1 Promote hedges as opposed to fencing.

3.2 Advice will be given to Northolt Primary School on a new wildlife area with tree planting.

Medium term targets (5-10 years)

3.3 Contact all private schools and colleges in order to ascertain their commitment to biodiversity and wildlife areas.

3.4 Encourage all schools and colleges in Ealing to have a wildlife area.

Long term targets (10-50 years)

4.1 Encourage schools to maintain the existing area of open space around schools.

4.2 Encourage all schools and colleges (public and private) to manage their grounds in a sustainable and educational manner.

4. RESPONSIBLE BODIES

LBE - Education Department
LBE - Parks and Countryside Service (for grounds maintenance aspects and advice)
Private schools
Ealing Tertiary College
Thames Valley University

5. COMPLEMENTARY PLANS

Some other local authorities in London, for example Bexley, are developing habitat action plans for school grounds.

HEDGEROWS

Hedgerows were and often still are stock-proof field boundaries, which were sometimes planted with woody species and sometimes retained from woodlands when most of the woodland was grubbed up for farming. Many still exist as a continuous line of dense shrubs but others have degenerated into lines of intermittent trees.

1. CURRENT STATUS

1.1 IMPORTANCE

As they usually consist of native trees and shrubs, often in a dense state, hedgerows are good habitats for butterflies and moths, birds and small mammals. Where the hedges derive from relics of ancient woodland, they may retain a high diversity of plants, both woody and herbaceous. In towns, and indeed often in farmland, they can provide a valuable alternative to woodland.

Ealing retains only a few hedgerows from its original farmland system, mostly around Horsenden Hill and in the northwest of the borough. Visually they provide variety to an otherwise flat landscape and increase the habitat diversity of the grasslands where they are found.

1.2 TRENDS

There is a continuing decline in the total length of hedgerow in Great Britain. The UK Steering Group Report of 1995 on Biodiversity estimates a loss of 5% per annum, but this loss is largely within active farmland. There are no figures available for Greater London or the south-east of England as a whole, but it is likely that the rate of loss is lower in Greater London because there are so few hedgerows left. Indeed, in Ealing, the rate of loss may now be fairly low. Most of the borough's ancient hedgerows are in Council-owned land or otherwise protected and are not in immediate danger. With sensitive management, it should be possible to retain their hedgerow characteristics.

Since it has been noticed that many hedgerows were being grubbed up by farmers, there have been many groups set up to protect hedgerows and efforts have been made to retain or re-plant them. A hedgerow is comparatively easy to create, and the Parks and Countryside Service has helped local school children and Friends groups to plant hedges in order to increase wildlife in parks, and to help them better to appreciate nature conservation.

1.3 AREA

It's difficult to talk of hedgerows in terms of area, and length is usually used to measure this habitat. There are at least 12 km of hedgerow in the borough which have been recorded as part of the habitat audit but diversity is variable.

There must be many more hedgerows in the borough, which could probably be found only by survey. Many hedges are now simply part of the scrub, which has grown up alongside railway lines, or have become scrub themselves, or have become remnant lines of trees. An exact figure for length of hedgerow in the borough is consequently difficult to work out.

1.4 DISTRIBUTION

Hedgerows are scattered throughout the borough, but, because of their association with fields, very few are found in urban areas like Acton, and the majority are found in the northern and western parts of the borough. In particular, ancient and/or species-rich hedgerows are nearly all found in the northern third of the borough.

2. FACTORS AFFECTING THE HABITAT

- Road widening and alignment has resulted in the loss of some hedges and could still occur with both traditional and park-boundary hedges.
- Neglect leads to hedgerows developing into lines of trees and the development of gaps. This is probably the greatest threat to the majority of ancient or species-rich hedgerows in the borough.
- There can be a loss of hedgerow trees due to them dying out or felling without them being replaced.
- Excessive or bad cutting can lead to poor habitat conditions and the eventual destruction of parts of the hedge.
- In the twentieth century hedgerows have been removed for agricultural purposes but this practice has stopped in Ealing as there is no agricultural land left.
- Traditional weeding or spraying of the bases of, for example, hedgerows in parks, prevents the survival of woody species other than the planted ones and prevents the development of a rich herbaceous flora.

3. CURRENT ACTION

3.1 PROTECTION

The Environment Act 1995 introduced an enabling power to protect *important* hedgerows in Britain, but so far no hedgerows in Ealing have been determined as important. Many hedgerows in Ealing, though, do have some status, which affords them some protection from removal or development. Generally the hedges are protected because they form part of a larger site but occasionally hedges are protected in their own right.

Perivale Wood is a Local Nature Reserve (LNR) and a Site of Metropolitan Importance for Nature Conservation (SMI).

Several sites in the borough are designated Sites for Local Nature Conservation (SLNC) in the Unitary Development Plan. Three sites are

designated primarily for their hedges: Sudbury Lane, Northfield Avenue hedges, and the hedge at Avenue Road, Southall. Some other sites include hedges. These are:

Brentside High School
Land at east Acton
Twyford Abbey Grounds
Cavendish Wilderness Area
Paradise Fields
Walford High School nature area
Islip Manor Meadows (also an SMI)
Downe Manor, Northolt
Field and Wood between Norwood Road and Osterley Lane

The Unitary Development Plan also designates several large areas as Nature Conservation Management Areas, and some of these include hedges. These are Brent River Park, Horsenden Hill (also partly an SMI), Lime Trees Golf Course, and Rectory Park/Kensington Playing Fields. These designations do not protect the hedges as such, but it is expected that the overall management will encourage nature conservation and the existence of hedgerows will be included in this.

3.2 MANAGEMENT

Except for hedges planted recently in parks and open spaces, most, if not all, of the hedgerows in Ealing would have been planted or formed as parish or field boundaries. They would have been laid as necessary to manage them. Where the fields remained into the twentieth century as stock-proof barriers they would have been cut or flailed, but there would have been comparatively few of these. In the main, where the fields adjoined roads, occasional management in the form of cutting or flailing would have been, and still is, necessary on the roadside to allow access. Otherwise, in the twentieth century, the majority of Ealing's old hedges have probably received little management other than the removal of fallen or dangerous trees.

Hedges which are of recent origin and planted as boundaries of parks and open spaces or of school grounds are usually cut twice a year to keep them tidy, and the hedge bases are kept free of weeds, often by the use of herbicides to the detriment of wildlife. However, schools have been encouraged to plant hedges in their grounds as part of their wildlife areas. The cost of this sort of planting generally comes from the school's individual budget.

The Parks and Countryside Service runs events and activities with schools, and these have included elements on the wildlife of hedgerows and woodlands. Similar activities have involved children from local schools helping to plant new hedges in open spaces and keeping an eye on them as they develop. Local residents often volunteer to help on conservation tasks in their local open spaces and they help the Parks and Countryside Service to plant trees and hedges, and naturally they are informed of the good ecological reasons for doing so.

No research is carried out on hedgerows in Ealing. Monitoring of hedgerows has not been carried out in the past, but will be included in the management plans for, e.g. Horsenden Hill, where the species composition should be recorded on a regular basis.

On land managed by the Council's Parks and Countryside Service, small-scale hedge planting can be incorporated within existing grounds maintenance budgets. The Council also has several large-scale projects for the development of some of its open spaces.

Without maintenance, hedgerows will degenerate, and ideally they should be regularly cut or trimmed in some manner. For hedges in formal areas or beside paths, cutting may need to be twice a year, but it is best if hedges are allowed to become fairly bushy. Hedges in less sensitive areas are best cut once every second year. If an attempt is made to achieve the target of greatly increasing hedgerows in Ealing, some effort will need to be made to secure the extra costs of maintenance.

4. SPECIES

Blackthorn is the commonest species in the older hedges, hawthorn in the more newly planted ones. Midland hawthorn, wild service tree and spindle are the only notable species in hedgerows in Ealing, but these are fairly rare and are generally found in hedgerows, which are derived from a woodland edge.

5. OBJECTIVES

1. The total length of hedgerows of nature conservation value in Ealing should remain constant or increase.

2. All ancient or species-rich hedgerows should be retained for their full lengths where possible.

3. Management of all existing hedgerows should be carried out in such a manner as to maintain or increase their biological diversity, including trees and herbaceous plants.

4. Existing hedgerows should be gapped up by new planting.

5. Lines of former hedgerows in open sites should be recreated where this is still possible.

6. Hedgerows should be planted at suitable sites in order to create or increase wildlife diversity.

6 TARGETS

Short term targets (0-5 years)

1.1 Finalise the audit of all hedges of higher nature conservation interest in the borough and keep it up-to-date.

2.1 Ancient hedgerows in Ealing should be recorded and as locally important sites for nature conservation.

3.1 Manage the hedgerows at the edges of Ealing Central Sports Ground, Pitshanger Park and Cleveland Park as conservation hedges rather than hawthorn hedges.

6.1 Gap up all existing species-rich hedgerows on Council-owned land.

5.1 Ensure the survival and development of all recently-planted hedgerows.

5.2 Investigate replanting of former hedgerows as identified in historical conservation plans.

6.1 Hedges to be planted at 10 sites (including schools) per year, as specified in nature conservation work programmes.

Medium term targets (5-10 years)

3.2 Ensure that every hedgerow of conservation interest in the borough has a management statement, which promotes its value for nature conservation.

3.3 Ensure that every hedgerow in the borough, which can be managed for nature conservation without affecting its value as a formal boundary hedge is managed for biological diversity.

3.4 Where land is leased from the Council, ensure that the conservation management of any hedges on the land is included in the lease agreement.

6.2 Encourage every school in the London Borough of Ealing to maintain or plant a length of hedgerow in its grounds for nature conservation value.

Long term targets (10-50 years)

1.2 Seek to achieve and then maintain a total length of species-rich hedgerow in the London Borough of Ealing of 20 km.

2.2 Monitor the length of all designated hedgerows of conservation importance every 5 years.

3.5 Monitor the species composition of all designated hedgerows of conservation importance every 5 years.

7. RESPONSIBLE BODIES

LBE - Parks and Countryside Service
LBE - other departments involved with schools, housing etc.
London Ecology Unit
London Wildlife Trust
Selborne Society
English Nature
British Waterways Board

8. COMPLEMENTARY PLANS

Volume Two of *Biodiversity: The UK Steering Group Report* (London: HMSO, 1995) includes a costed habitat action plan for ancient and/or species-rich hedgerows and habitat statement for boundary features.

The consultation draft of *The Future of Darwin's Wildlife in Bromley* (The Bromley Biodiversity Action Plan, 1998) includes an action plan for hedgerows, similar to this one but without any specific targets.

NEUTRAL AND MARSHY GRASSLANDS

Neutral grasslands are mostly found within enclosed field systems on moist mineral soils with a pH of between 5 and 6.5. Suitable soil conditions occur widely over level and slightly undulating ground throughout the British Lowlands.

Unimproved neutral grasslands have been prone to modern agricultural improvement and as a consequence are very scarce. They are used for both hay production and grazing. Ealing is very fortunate in encompassing several areas of grassland, which are extremely rich in plant and animal life, these habitats are particularly valuable in a densely populated urban area.

Various scattered areas of marshy grassland exist within Ealing. These consist of grassland where the water table is at or above the surface for much of the year.

1. CURRENT STATUS

1.1 IMPORTANCE

Horsenden Hill, Islip Manor and Yeading Brook Fields are among the most important neutral grasslands in London. All three areas are in public ownership and the first two are accessible to the public. The grassland within Perivale Wood Local Nature Reserve is also excellent

Plants which were once typical of hay meadows and pastures, but which have become increasingly localised throughout Britain as farming practices changed can often be seen.

Besides these areas Ealing also possess several other, smaller, sites such as Greenford Park Cemetery, which still retain many elements of unimproved grassland. All of these provide valuable flora and fauna.

Increased demand for land to be used for agriculture and more recently housing has led to a reduction and fragmentation of marshy grassland. This has further increased due to flood defence works.

1.2 TRENDS

A number of the sites within the Borough of Ealing are now benefiting from being included in the Countryside Stewardship Scheme.

1.3 AREA

Neutral Grassland in Ealing occupies an area of approximately 300 hectares. A slightly different definition used in the London Biodiversity Action Plan audits gives a figure of 240 hectares, 2.3% of London's resource.

1.4 DISTRIBUTION

NEUTRAL GRASSLAND
Perivale Wood LNR [1]
Horsenden Hill [1]
Paradise Fields
Grove Farm
Carr Road, Northolt
Northolt Manor LNR [2]
Belvue Park
Smiths Farm [2]
(Marnham Tip) [2]
Islip Manor Fields [1]
Yeading Brook Meadows LNR [1]
Brentham Meadows [2*]
Ealing Golf Course
Perivale East Meadow [2*]
Gurnell Fields [2*]
Long Field [2*]
Perivale Park Meadows [2*]
Ruislip Road East Conservation Area [2*]
Bridge Avenue Extension [2*]
Marnham Field [2*]
Brent Valley Golf Course [2*]
West Middlesex Golf Course [2*]
Brent Lodge Park [2*]
Churchfields [2*]
Brent Meadow [2*]
Blackberry Corner [2*]
Jubilee Meadow [2*]
Trumpers Field [2*]
Mallard Close
Warren Farm
Earl of Jersey's Field
(Wyncote Farm)
Elthorne Rough [2*]
Elthorne Park Extension [2*]
Well Meadow [2*]
Lower Well Meadow [2*]
Tentelow Meadow
Glade Lane Open Space
Glade Lane Canalside Park [3]
(Spikes Bridge Park)
(King George VI PF)
(Blondin Park)
Fox Wood LNR [2]
Hanger Hill Park
Ealing Common

MARSHY

Boles Meadow [2*]
Well Meadow (parts of) [2*]
Lower Well Meadow (parts of) [2*]

2. FACTORS AFFECTING THE HABITAT

1. Loss through agricultural improvement (ploughing, re-seeding, fertilising, herbicide use) and development.
2. Lack of traditional management (e.g. silage rather than hay making, over-grazing, particularly by horses).
3. Spread of invasive plant and animal species.
4. Damage through ignorance of site value (e.g. by tree planting, neglect or over grazing).
5. Habitat fragmentation, (loss of species diversity, loss of area and populations, isolation of small sites threatens management economics).
6. Improved local drainage (marshy grasslands).
7. Neutral grassland of low quality is often targeted for development because it is not especially valuable for agriculture or nature conservation. This reduces the pool of neutral grassland, which has potential for restoration.
8. Marshy grasslands are often small parts of larger fields, which creates problems for management and targeting action.

3. CURRENT ACTION

3.1 PROTECTION

Perivale Wood has SSSI designation.
See Distribution:
[1] = Site of Metropolitan Importance
[2] = Site of Borough Importance - Grade 1
[2*] = Site of Borough Importance - Grade 1, as part of the Brent River Park
[3] = Site of Borough Importance - Grade 2

3.2 MANAGEMENT

1. To conserve and enhance the historic interest and natural beauty of the landscape.
2. To conserve and enhance existing wildlife habitats and to create new ones in order to increase wildlife diversity and populations.
3. To develop educational use, but always with the primary aim being to protect the plant and animal resource.
4. To develop balanced formal and informal recreation use in the manner appropriate to the rural character.
5. To promote access to and enjoyment by all sections of the community and encourage their involvement in the management of the areas.

4. SPECIES

Notables

Adder's tongue fern, yellow rattle, *Festulolium braunii* and *Festulolium loliaceum* (rare grass hybrids).
The rare hybrid willow Salix *aurita x viminalis*, sometimes called the basket-making willow (unique in the London area). Slowworm.

Standard Bearers/Quality Indicator Species

Neutral grassland: Common spotted orchid, pignut (locally rare), birds foot trefoil, common fleabane, pepper saxifrage, teasel, meadow vetchling, black knapweed, crested dog's tail (all in decline).

Damp grassland: common fleabane, water mint, marsh foxtail, lesser reedmace, common spike rush, cuckoo flower, meadow sweet, ragged robin, purple loosestrife, sneezewort, blinks (all in decline).

Kestrels (species of conservation concern) and starlings.
Gatekeeper, small copper, holly blue.
Hedgehog and pygmy shrew (both species of conservation concern).

Negative

False oatgrass.

Retrievables

Brown argus.

3. OBJECTIVES/TARGETS

1. To maintain and enhance the nature conservation value of all sites in order to support the full and appropriate range of flora and fauna.

2. Ensure native seed, (of local provenance if available) is used in all habitat creation projects).

3. To integrate the conservation of nature and historic landscape of the sites with the development of leisure pursuits and environmental education.

Short term targets (0 - 5 years)

1.1. To prevent the further loss of species - rich neutral grassland.

1.2. To secure positive traditional management of the remaining unimproved neutral grassland sites in the area, and wherever possible to extend this to the species-rich semi-improved sites.

1.3. To create and restore habitats by promoting appropriate management of those improved grasslands in proximity to valuable neutral grassland areas, enlarging areas and creating links between existing fragments.

1.4. To halt the further loss of semi-improved areas to development by ensuring that all known areas receive protection via Unitary Development Plan designation.

3.1. Identify potential areas for creation/extension of habitat including Marnham Field, West Middlesex Golf Course, Warren Farm, Spikes Bridge Park, and King George VI Playing Field.

Medium term targets (5-10 years)

1.5. Monitor meadow improvement and creation projects and share best practice.

2.1. Investigate and promote economic use of seed and herb products from meadows.

Long term targets (10-50 years)

1.6. Carry out selective review of improved, semi-improved and unimproved neutral and marshy grassland sites to check integrity.

6. RESPONSIBLE BODIES

London Borough of Ealing (LBE), Environment Agency (EA), English Nature (EN), Ministry of Agriculture, Food and Fisheries (MAFF/FRCA), EP+CS, FWAG, Selborne Society.

7. COMPLEMENTARY PLANS

A UK plan for Lowland Hay Meadows is in preparation. (No lead has been agreed as yet).

PONDS

Standing areas of water, whatever their size provide an invaluable habitat for a diverse range of flora and fauna in Ealing. These habitats, both the aquatic and surrounding terrestrial are particularly valuable in a densely populated urban area.

1. CURRENT STATUS

1.1 IMPORTANCE

Throughout Ealing a network of ponds create important links for many fauna species such as dragonflies. Ponds are varied in design, size and nature (i.e.: ornamental, formal, shallow, seasonal etc.). They are found in the borough in most school grounds, many parks and open spaces, and probably hundreds of private back gardens.

1.2 TRENDS

Sadly some ponds in the borough have been lost (i.e.: Fox Wood LNR, Norwood Green and Jubilee Meadow) but the trend has tended towards many new pond areas being created (i.e.: Acton Park Lodge, Blondin Park Wildlife Area, Trumpers Field and many in gardens and school grounds). These vary in age and quality, unfortunately many suffer from pollution due to surface runoff from roads, dumping and littering.

1.3 AREA & DISTRIBUTION

Ponds are distributed throughout the borough and number and range is impossible to calculate at this time as the majority of ponds are on private land and are of a currently unknown quantity.

2. FACTORS AFFECTING THE HABITAT

1. Declines in water quality, in particular the high incidence of pollutants from road run-off, eutrophication and from dumping/ littering.

2. Spread of invasive plant and animal species.

3. Loss and fragmentation due to development, disturbance and natural succession.

4. Possible reduced water levels due to drought and climate change.

5. Lack of appropriate management with no incentive to create new ponds in the Borough.

6. Infilling of ponds for safety reasons.

3. CURRENT ACTION

3.1 PROTECTION

No sites have SSSI or SINC (Site of Importance to Nature Conservation).

4. SPECIES

Standard Bearers/Quality Indicator Species
Lesser marshwort, great crested newt, bats, and common toad.

(Positive)
Dragonflies, damselflies, slowworm, great diving beetle, smooth newt, moorhen, coot, mallard.
Irises, fiddle dock, gipsywort, water plantain, water crowfoot.

(Negative)
duckweed, terrapins, Himalayan balsam, azola, blanket weed.

5. OBJECTIVES

1. To maintain and enhance the nature conservation value of all ponds in the borough in order to support the full and appropriate range of flora and fauna.

2. To integrate the conservation of natural and historic landscapes with the development of leisure pursuits and environmental education.

3. To contribute to, and collate relevant research undertaken by LBE, EA, LWT, etc.

6. TARGETS

Short term targets (0 -5 years)

1.1 To promote improved management of existing ponds and surrounding areas, i.e.: best practice in the treatment of invasive species such as using ‘Clarity’ a natural remedy to treat blanket weed or algal problems.

2.1 Continue to raise awareness of the wildlife value of ponds, particularly to schools and local residents through articles, talks, project weeks and workshops.

3.1 To design and conduct a repeatable survey of ponds (combined with a garden survey) in the borough to establish numbers, distributions, size, age, species seen etc. (To be repeatable in design). This project will need additional resources.

Medium term targets (5 -10 years)

1.2 Reduce fragmentation by creating 2 new ponds each year in identified areas of low numbers (based on the results of 3.1) to create a network and ensure an even distribution. This will require resources based on the size, location etc. of proposed new ponds.

1.3 Co-ordinate a programme of restoration/creation of ponds in specific areas to expand the range of identified rare species (i.e.: great crested newt).

1.4 Ensure effective management of existing ponds and surrounding terrestrial areas.

1.5 Protect existing ponds through designation as SNCs

2.2 To set up a pond warden network.

3.2 Re-run of initial survey of the Boroughs ponds.

Long term targets (10 - 50 years)

3.3 Continue to monitor and survey ponds in the borough**.**

7. RESPONSIBLE BODIES

LBE, EA, EN, LWT, GLA, Landowners,

8. COMPLEMENTARY PLANS

Private Gardens, Education Land.

REED BEDS

Reed-beds are amongst the most important habitats for birds in the UK. Nationally there are about 5000 ha in 900 or so sites. Only 50 of these sites are greater than 20 ha. Reed beds support six nationally rare Red DataBook birds and five Red Data Book invertebrates are closely associated with reed beds. In Ealing reed beds are very small but they are particularly valuable in such a densely populated urban area.

1. CURRENT STATUS

1.1 IMPORTANCE

Reed beds are associated with standing or flowing water. In Ealing beds have either developed naturally on wet land or have been planted to aid nutrient filtration from polluted water.

They add an important habitat for nature conservation, providing nesting sites for reed warblers, roosting areas for reed buntings and wintering sites for water rail. *Odonata* are attracted to reed beds for breeding and resting & feeding.

Reed beds also provide feeding areas for migrating birds especially in autumn.

In Ealing they are a scarce habitat.

1.2 TRENDS

Reed beds are fragile habitats, many have suffered from drainage and lack of management resulting in drying out and succession to scrub/woodland.

Ealing's beds mostly lie within Sites for Nature Conservation.

Acceptance by water authorities as an approved way of cleaning polluted water has increased the number of beds in Ealing.

Nationally English Nature and the RSPB among others have undertaken restoration and creation of reed beds in recent years.

1.3 AREA

Difficult to assess accurately but probably between 2 to 3 Ha.

1.4 DISTRIBUTION

Beds are found as follows:-Horsenden Hill (Canal Ponds, Paradise Fields – the former IBM site and a small area at Horsenden Farm).

Carr Road, Northolt (between allotments and the Grand Union Canal)

Northolt & Greenford Countryside Park (Greenford Lagoons, two small relict patches at Marnham Fields, and a small area around a pond on Smith's Farm)

Brent River Park (Mayfield outlet to River Brent, Elthorne Waterside and Lower Well Meadow)

The Aviary, Osterley (a newly planted bed on a private site)

2. FACTORS AFFECTING THE HABITAT

3. Under management and siltation resulting in succession to scrub and woodland.

4. Disturbance from visitor pressure.

5. Loss of water due to drainage

6. Pollution of freshwater supply; toxic chemicals and accumulation of poisons leading to loss of food chains.

3. CURRENT ACTION

3.1 PROTECTION

No sites have SSSI or Local Nature Reserve designation. Horsenden Hill is a Site of Metropolitan Importance; the other sites are all of Borough Importance for Nature Conservation as designated by the London Ecology Unit (now part of the Greater London Authority).

3.2 MANAGEMENT

Many of the reed beds are relatively new, having been planted in the last five years or so. Little management takes place but beds at Greenford Lagoons are cleared from around weirs as required.

Scarcely any monitoring takes place in Ealing but some bird ringing takes place at Carr Road reed bed. A programme for monitoring is required and with many reed beds still in the development stage now is an appropriate time to set this up.

On the whole management work can be carried out as part of the Parks & Countryside Service's nature conservation programme. Clearing and cutting of reed at Greenford Lagoons is carried out by contractors as required.

4. SPECIES

Notables
Little grebe, water rail.

Standard Bearers/Quality Indicator Species
Reed warbler, grey wagtail, reed bunting, heron, dragonflies and damselflies.

5. OBJECTIVES

1. Maintain and enhance the nature conservation value of all reed beds in order to support the full and appropriate range of flora and fauna.

2. To work with water authorities to ensure any drainage schemes to River Brent or Yeading Brook are via reed bed filtration.

3. Ensure minimal disturbance

6. TARGETS

Short term targets (0-5 years)

1.1 Prevent silting up of reed beds by occasional removal of sediment if required.

1.2 Cut reed beds on cyclical basis up to 1/3rd per year after initial 5 years growth if required.

1.3 Coppice, pollard or remove willows as necessary.

1.4 Where possible improve reed beds by re-introduction of water e.g. Marnham Fields.

1.5 Seek opportunities to increase reed bed areas e.g. Paradise Fields.

1.6 Devise monitoring programme to cover birds and dragon/damsel flies.

2.1 Liaise with Water Authorities to ensure they are aware of Borough reed beds and Council policy.

3.1 Erect signage explaining fragility of reed beds and nature conservation benefits as and when funding becomes available.

Medium term targets (5-10 years)

1.7 Implement management work as necessary.

1.8 Prepare management plan for Carr Reed Bed and designate it a Local Nature Reserve. Subject to ownership being resolved with Railtrack.

1.9 Continue monitoring programme.

Long term targets (10-50 years)

1.10 Ensure no loss of reed bed area.

1.11 Continue management and monitoring programmes.

7. RESPONSIBLE BODIES

LBE, Environment Agency, Thames Water, English Nature.

8. COMPLEMENTARY UK PLANS

Lee Valley Park Authority / RSPB / English Nature initiative in Lee Valley to increase /improve reed beds for to encourage Bittern to breed.

RIVERS, STREAMS AND CANALS

Open moving water in Ealing contains a diverse range of flora and fauna, as do the surrounding green corridors. These habitats are particularly valuable in a densely populated urban area.

1. CURRENT STATUS

1.1 IMPORTANCE

The main flowing water in Ealing is the River Brent, into which Costons Brook and a few minor streams run. Much of the adjacent land forms the Brent River Park and is managed for its nature conservation value. Other streams of note are the Boundary Stream and Yeading Brook, both supporting a host of aquatic and marginal plants. There are also two branches of the Grand Union Canal.

One of these joins and incorporates part of the River Brent. All of the above provide wild life corridors and valuable flora and fauna assemblages.

The River Brent and the canal are popular with walkers. Additionally cycling, fishing and boating is carried out on the canal.

1.2 TRENDS

The quality of running water in the Borough has recently begun to improve, however, the River Brent is still subject to the consequences of pollution. The close proximity of the river to such a densely populated area exacerbates the problem.

Another factor is the connection of washing machines etc. into old plumbing systems, which link directly with the River Brent.

Canalisation and culverting has occurred in sections of the River Brent, but co-operation between Ealing Parks and Countryside Service and the Environment Agency allows continuing improvements to enhance wildlife habitats.

1.3 AREA

Open water in Ealing occupies an area of approximately 90 hectare. Running water and canals are mainly distributed in the north west of Ealing.

1.4 DISTRIBUTION

Ealing contains 2 main river catchments. The River Brent bisects Ealing. The river runs from Hanger Lane in the west to Greenford, where it is joined by Costons Brook and then descends southward. At

Hanwell, the river joins the Grand Union Canal and continues southward until it meets the Thames at Brentford.

The Grand Union Canal divides into 2 branches at Bull's Bridge. The main branch runs in an easterly direction to join the River Brent. The Paddington branch runs north-east from Bulls Bridge.

2. FACTORS AFFECTING THE HABITAT

1. Changes in water quality, in particular the high incidence of pollutants both transient and more continual problems arising from dense urban and industrial surrounds.

2. Road run-off, possible problems with the demands from existing golf courses and any such future developments and other factors likely to reduce flow rates.

3. Spread of invasive plant and animal species.

4. Management of the river channel and bankside vegetation - lack of low intensity grazing of banks.

5. Development and disturbance including recreation.

6. Possible reduced water levels due to drought and climate change.

7. Straightening of river channels changing of water flow as part of past flood protection works.

3. CURRENT ACTION

3.1 PROTECTION

No sites have SSSI or SNCI designation. There are long term objectives defined in management plans and run in conjunction with the Environment Agency and other parties to improve the water quality and wildlife value of the River Brent and Costons Brook. This has and will continue to be achieved by appropriate control of water flow and levels and ensuring the flood plain is protected.

3.2 MANAGEMENT

The River Brent, Costons Brook, small streams and channels feeding into the Brent River Park are included within management plans, which also cover adjacent wet/dry land areas. (N.B. the flow of the River Brent is set by the EA/BWB at Brent Reservoir). Six aims for the Brent River Park are:

1. To conserve and enhance the historic interest and natural beauty of the landscape.

2. To conserve and enhance existing wildlife habitats and to create new ones in order to increase wildlife diversity and populations.

3. In conjunction with the Environment Agency and Thames Water, to improve the water quality of the River Brent and Costons Brook and ensure the flood plain function of the river valley is protected.

4. To develop educational use, but always with the primary aim being to protect the plant and animal resource.

5. To develop balanced formal and informal recreation use in the manner appropriate to the rural character of the Park.

6. To promote access to and enjoyment of the Park by all sections of the community and encourage their involvement in the management of the Park.

Recent works have included, digging a pond and creating a ditch by the lower slopes of Elthorne Waterside. Also at Trumpers Field there has been riverside enhancement works such as creating a pond and fencing the canal boundary in preparation for low intensity grazing project.

4. SPECIES

Notables

White-clawed crayfish, water vole (rare, priority species in decline), kingfishers (Species of conservation concern).
Great crested newt (rare priority species).
Large bittercress, opposite-leaved golden saxifrage, marsh marigold and spiked water milfoil (rare within Ealing). Remote sedge (uncommon). Daubenton's bat.

Standard Bearers/Quality Indicator Species

Grey wagtail, heron, mute swan, reed warbler, mallard and kingfisher. Gipsy-wort, bur-reed, water mint, great water dock, bittersweet, common horsetail, fool's watercress, comfrey, great hairy willow-herb and yellow flag. Water-dropwort, great yellow-cress, meadowsweet and purple loosestrife (all in decline).

Positive

Dace (also a range of fish species), dragonflies, damselflies, bats, common toad, great crested newt, narrow-leafed water dropwort, black poplar.

Negative

Chinese mitten crabs, introduced crayfish, giant hogweed, Himalayan balsam.

Retrievables
Otter, black poplar *populus nigra* ssp *betulifolia*: rare, priority species, species of conservation concern.

5. OBJECTIVES

1. To maintain and enhance the nature conservation value of all catchment areas in order to support the full and appropriate range of flora and fauna.
2. To continue involvement with the following local groups: Brent River and Canal Society, Hounslow and Ealing Conservation Volunteers, Ealing Wildlife Network, and regional representatives of London Wildlife Trust and the Royal Society for the Protection of Birds.
3. To integrate the conservation of nature and historic landscape with the development of leisure pursuits and environmental education.

6. TARGETS

Short term targets (0 - 5 year)

1.1. Implement programme of removing giant hogweed, with a target of 15% reduction.

1.2. With E.A. approval create a continuity of riverside pollarded trees.

1.3. With E.A. approval Strike pollarded willow arisings to aid removal of excessive nutrients from the water.

1.4. Research and collate any relevant historical/current information on water voles and their habitats in Ealing (See SAP).

1.5. Increase the width of waterside fringe habitats and carry out a feasibility study on the possibility of introducing low intensity grazing in order to improve habitats suitable for water voles.

2.1. Initiate, plan and train staff, volunteers and members of other interested organisations to carry out initial an initial survey of water voles and their habitats.

1.6. If appropriate commission professional research into the impact of mink on water vole population in Ealing.

1.7. Intergrate plan with black poplar species action plan.

1.8. Integrate plan with the water vole species action plan.

Medium term targets (5 - 10 years)

1.9. Improve water quality and reduce incidences of pollution.

3.1. Maintain and enhance aquatic and waterside habitats.

1.10. Achieve LNR designation for Greenford Island.

1.11. Carry out a feasibility study on the possibility of re-introducing otters to the River Brent.

1.12. North of A40 at Brentham - Work to get enhancement of water quality and riverside habitat as an action in the revised LEAP.

1.13. Perivale East Meadow - improve riverside habitat - create pond.

1.14. Dormers Wells Allotments - restore ponds, stream and moat (feeder stream to the River Brent and create access).

1.15. Fitzherbert Walk, Walker Close, St. Margarets Road site de-silt channel and improve habitats.

1.16. To set back and plant sedge beds, to act as filters, by any new or newly maintained sewage outlets.

1.17. To contribute to, and collate, relevant research undertaken by LBE Environmental Health and Pollution Control departments, the EA etc.

Long term targets (10 - 50 years)

1.18. To reduce habitat fragmentation by linking as many riverside habitats as possible.

1.19. Investigate the possibility of acquiring land where possible in order to achieve above.

1.20. In conjunction with the Environment agency and Thames Water, continue to improve the water quality of the River Brent and Costons Brook and ensure the flood plain function of the river valley is protected.

1.21. Establish a nursery for black poplar in the Ealing (subject to the results of regeneration planting).

7. RESPONSIBLE BODIES

London Borough of Ealing (LBE), Environment Agency (EA), British Waterways (BW), English Nature (EN), Ministry of Agriculture, Food and Fisheries (MAFF/FRCA), Greater London Authority (GLA).

8. COMPLEMENTARY PLANS

The Environment Agency has produced a broad Habitat Statement for Rivers and Streams.
The Local Environment Agency Plan (LEAP).
The London Biodiversity Action Plan, various habitat and species action plans.

WOODLAND (INCL. SCRUB)

Nationally woodlands have suffered from neglect, over harvesting, and clearance for development. Britain has one of the lowest areas of tree cover in Europe. Ealing has a number of woodlands covering the whole spectrum of ancient, secondary, recent and wet. They are important habitats for wildlife, afford considerable educational opportunities and provide recreational facilities to the public. Within a London borough they are of the utmost importance.

1. CURRENT STATUS

1.1 IMPORTANCE

Ealing has several ancient or part ancient woodlands, defined as being at least four hundred years old. They are Perivale wood, Horsenden Wood, Grove Farm(part), Tentelow and Long Woods and Osterley Island(at Elthorne Waterside). Fox Wood may have ancient woodland claims and Hanger Hill Wood while now comprising mainly planted non native trees is shown on numerous maps dating from 1393.
Perivale Wood is privately owned by the Selborne Society and is undoubtedly the premier woodland in Ealing, comprising pedunculate oak standards with hazel coppice. Ash, field maple and wild service are also found. The latter is an indicator of ancient woodland. There is a rich shrub, herb and field layer. Particularly notable is the fine display of bluebells.

Horsenden Wood is of similar age to Perivale but is totally different in appearance. Records show the wood was oak standards with hornbeam coppice. Both species are still present but there is little or no shrub, herb or field layer. Wild service tree is present with some fine specimens and some bluebells still survive. The wood is widely used for recreation and trampling of vegetation and lack of management has led to its open aspect. Of the other ancient woods Grove Farm has some large oaks and also wild service. Wood anemones thrive.

Tentelow Wood is dominated by oak and hornbeam while Long Wood holds oak, ash and crack willow with alder, field maple and hornbeam. Hanger Hill Wood has one of the Borough's largest oaks and beech is found but many of the trees are exotics planted many years ago. Fox Wood holds some large oaks and wood anemones and bluebells are found there.

Most of these woodlands are well used by the public, but Perivale is only open once a year to the public. It is well used by schools for project work.

There is considerable secondary woodland in the borough has well as scrub, supporting varied fauna and flora.

Railway land is not included in this plan but mention should be made of Halsbury Road cutting, declared Metropolitan Open Land following attempts to develop housing on the site. The woodland is dominated by oak and ash with gean, field maple and a good mix of shrub species including both hawthorns.

1.2 TRENDS

The woodland in Ealing is fragmented which may hinder movement of species and possibly cause long term decline in quality.

Plantings to replace elms affected by Dutch elm disease were not always appropriate in terms of site or species.

Within recent years a number of Ealing's woods have benefited from positive management.

The Borough UDP makes explicit reference to a number of woods and policies to enhance them (Policy OL7xx).

Management plans exist for the Litten LNR, Grove Farm and Long Wood and Fox Wood. Plans are being prepared for Horsenden Wood and Tentelow Wood. Surprisingly a written plan does not exist for Perivale Wood although broad outline exist. A plan exists for Gunnersbury Triangle but much of this wood lies in Hounslow.

A Tree strategy for the London Borough Ealing is being produced which will link closely with this action plan.

1.3 AREA

Woodland and scrub in Ealing covers upwards of 70 Ha.

1.4 DISTRIBUTION

Much of the woodland lies in the north of Ealing, but pockets of woodland can be found throughout the Borough. There is a lack of woodland/scrub in Acton, parts of Southall and West Ealing. Much of the woodland is within Sites for Nature Conservation. The major high canopy woodland comprises:

Perivale Wood, Horsenden Hill, including Horsenden Wood and other woodland on the site, Grove Farm, Long Wood, Tentelow Wood, Fox Wood, Hanger Hill Wood, Osterley Island, woodland bordering the A40 by Greenford Lagoons, Halsbury Road cutting, The Aviary (private site in Osterley). Gunnersbury Triangle, Litten Nature Reserve. Other areas of note are Greenford Birchwood, Montpelier Park Wood, Norwood Hall(private site) and Yeading Valley Meadows.

New planting can be found at Elthorne Extension and on bunding at Marnham Fields/Greenford Lagoons.

Various areas of scrub are found around the Borough and need more detailed survey.

2. FACTORS AFFECTING THE HABITAT

1. Lack of management resulting in loss of under storey or closed canopy woods or growth of invasive species to the exclusion of native species.

2. Visitor pressure resulting in loss of under storey. Horsenden Wood is, sadly, an example.

3. Building Development. Close attention should be given to plans, which could lead to potential loss of, or damage to, woodland/green corridors on public and private land.

4. Railway land presents special problems requiring close liaison with Railtrack to prevent wholesale loss of habitat.

3. CURRENT ACTION

3.1 PROTECTION

Litten nature reserve, Gunnersbury Triangle, Fox Wood, Long Wood and Perivale Wood are Local Nature Reserves, the latter is a Site of Special Scientific Importance. All of the woodlands mentioned are afforded some protection within the Borough UDP either as Sites of Metropolitan importance or Sites for Local Nature Conservation. All sites are contained within the London Ecology Unit's (now Environment Directorate of the Greater London Authority) Nature Conservation in Ealing.

3.2 MANAGEMENT

Management plans exist for the Local Nature Reserves mentioned above. A management plan has been drawn up for Grove Farm and plans for Tentelow Wood and Horsenden Woods are in preparation. In many woods some management work takes place. Lack of management in many woods may require drastic action to aid recovery and improve diversity.

Limited research is carried out on Ealing's woodlands. Perivale Wood is the best monitored. Management plans will include monitoring. This work, particularly involving birds & butterflies could be carried out by Friends groups with some training.

Trees are popular with the public and many organisations are prepared to put up money for planting. The Forestry Commission offer grants for planting and reinstating of management in woods but these often need to be backed up with detailed plans and ecological surveys.

4. SPECIES

Notables
Wild service tree, spindle, Midland hawthorn, small leaved lime.

Standard Bearers/Quality Indicator Species
oak, ash, hornbeam, alder, hazel, wood anemone, bluebell (native) greater spotted woodpecker, butterflies

(Positive)
Ground, herb, and shrub layers.

(Negative)
Sycamore, where this is to the detriment of other species or habitat, exotics.

Retrievable
Small leaved lime

5. OBJECTIVES

1 Maintain ancient and semi ancient woodland in the Borough.

2 Enhance/improve existing woodlands & scrub.

3 Increase Borough woodland area by planting, where other valuable habitat will not be lost .

4 Protect other important habitats from scrub encroachment.

5 Encourage broad community involvement in woodlands.

6. TARGETS

Short term targets (0-5years)

1.1 No loss of ancient / semi ancient woodland.

2.1 Prepare 2 management plans per year for high canopy woodland.

2.2 Identify sites for woodland planting, with the aim of increasing woodland cover in the Borough.

2.3 Prepare monitoring programme for woodlands and implement.

2.4 Implement survey of certain areas of scrub in the Borough.

2.5 Obtain LNR status for Grove Farm.

3.1 Encourage regeneration into previously wooded areas at Horsenden Hill and supplement with planting of appropriate species native to London.

3.2 Introduce canopy trees to areas of scrub such as Marnham Fields to create community woodlands and increase diversity.

4.1 Control invasive scrub where encroaching into other valuable habitat e.g. species rich grassland.

5.1 Provide schools projects such as Wonderful Woodlands Week and tree planting to engender understanding of the importance of woodlands. At least one project per year.

5.2 Encourage Friends Of groups to play an active role in woodland management through monitoring etc. and provide training for this purpose.

5.3 Ensure any controversial management work has adequate consultation and clear on site signage.

5.4 Make private owners, including Railtrack, aware of this action plan and explain the importance of their woodland as a local habitat.

Medium term targets (5-10 years)

1.2 Continue no loss of ancient / semi ancient woodland policy.

2.6 Review previously existing management plans and revise if necessary.

2.7 Implement management plans for all high canopy woodland.

2.8 Obtain LNR status for Horsenden Hill (including all woodland areas) and one other woodland.

2.9 Extend monitoring scheme to all LNR designated woodlands.

2.10 Prepare management plans for previously identified areas of scrub and implement.

3.3 Examine possibility of planting or extending planting on land owned by Education / Housing e.g. unused playing field at Northolt Rec. and Mandeville Parkway.

4.1 Continue to control invasive scrub where encroaching into other valuable habitat e.g. species rich grassland.

5.5 Continue Community activities/consultation, as described in 5.1-5.4

Long term targets (10-50 years)

1.3 Continue no loss of ancient / semi ancient woodland policy.

2.11 Review existing Management Plans and revise as necessary.

2.12 Obtain LNR status for all high canopy woodland.

4.3 Increase woodland cover to approximately 1.5% of Borough's area (approx. 83Ha)

5.6 Continue Community input as previously shown.

7. **Responsible Bodies**

London Wildlife Trust, Selborne Society, Forestry Commission, English Nature, LBE (Parks & Countryside, Housing, Education).

8. COMPLEMENTARY UK

PLANS

Government intent to increase woodland cover to 15% of UK land cover.
London Biodiversity Action Plan-Woodland Action Plan
London Borough of Ealing Tree Strategy.

ARABLE LAND - Habitat Statement

Arable land is taken to be land ploughed or otherwise cultivated and seeded either for agricultural crops or for nature conservation.

Arable land where cereal crops are grown for wildlife provides a rich winter food source for skylarks and a range of other granivorous birds including finches, buntings and sparrows. All of these groups have shown alarming population declines in recent years.

Ploughing creates a temporary feeding habitat for wagtails and migrant birds like wheatears and is attractive to lapwings which also nest on open areas provided disturbance is minimal.

Cornfield weeds have become very scarce in modern farmland under intensive management, but can be easily maintained under nature conservation regimes on ploughed sites.

Gradual loss of farmland in Ealing this century with little now remaining. Small amounts of land recently set aside as arable plough seeded with cereals and cornfield mixes for nature conservation purposes.

Ealing contains a number of parcels of arable land, usually created to add diversity within Nature Conservation Management Areas. Arable can be found at Glade Lane Canalside Park, Rockware Field at Horsenden Hill, Fitzherbert Walk by the River Brent in Hanwell, and on farmland at Osterley Park. No sites have SSSI or SNCI designation. There are no known complementary plans.

Management issues include:
1. Regular and appropriately timed ploughing and retention of winter stubble.
2. Ensure all larger sites are fenced to reduce disturbance to birds.

Current factors affecting the habitats - threat issues

1. Decline of farming in Ealing.
2. Lack of management, especially cultivation (ploughing).
3. Disturbance, including visitor pressure and recreation.
4. Change of land use.

Standard Bearers/Quality Indicator Species include: cornfield weeds, cereals, lapwings, partridges skylarks, wagtails, finches, buntings and sparrows.

Long term objectives include:

1. To maintain and enhance the nature conservation value of all arable areas in order to support the full and appropriate range of flora and fauna.

2. To integrate the conservation of nature and historic landscape

with the development of leisure pursuits and environmental education.

Proposed specific action include:

1.1). To maintain and increase the area of arable land managed for nature conservation.

1.2). To provide suitable nesting areas for lapwings free from disturbance.

1.3). To provide suitable winter feeding areas for skylarks.

1.4). To double the present area managed as arable land for nature conservation without compromising areas managed as neutral grassland.

1.5) To provide suitable conditions for the return of grey partridges, yellowhammers, and tree sparrows to Ealing.

16). To sustain breeding populations of grey partridges, yellowhammers, and tree sparrows in Ealing.

Responsible bodies include:

London Borough of Ealing (LBE)
National Trust (NT) for Osterley Park

“HEALTH LAND” – Habitat Statement

For the purpose of this statement Health land is defined as that surrounding hospitals, hospices, Children’s and residential homes, clinics and surgeries. Very little information is available concerning area or management. Hospices and homes often have gardens, which provide areas of relaxation. Hospitals will often have some green open space. These grounds are likely to be maintained independently of the Council.

FACTORS AFFECTING HABITATS

1 Loss of open space to development.
2 Use of chemicals to control pests and weeds.
3 Lack of consideration for nature conservation maintenance regimes.

OBJECTIVES

Attempts should be made to encourage wildlife sympathetic grounds maintenance where possible.

Acquaint Social Services, Local Health Authority and Hospital Management of the Council’s Bio Diversity plans.

Provide a consultation forum to advise on wildlife gardening within healthland.

PRIVATE GARDENS - Habitat Statement

Gardens represent an enormous potential for wildlife exploitation. In London there are estimated to be 30000ha of gardens compared with 17000ha of public open space. However the very fact that this statement is about ***private*** gardens means the direct impact we can have on their management is limited. Some may contain old trees or parts of parish boundary hedgerows. Larger gardens have the most potential for wildlife but even small gardens can be sympathetically managed for wildlife.

FACTORS AFFECTING HABITATS

Many front gardens have been given over to hard standing for car parking.
Modern housing tends to be high density with subsequent reduction of garden size.
TV gardening programmes may have a negative impact towards minimalist gardening with the emphasis on decking, gravel, and paving to the detriment of plants.
Excessive use of chemicals in gardening.
Pressure of disturbance from residents and pets.
Some areas and occasional individual properties may be governed by Tree Preservation Orders.
Some estates may have covenants, which may cover trees, hedges, and gardens.

OBJECTIVES

1. Identify extent of private garden habitat in Ealing.
2. Raise awareness of the importance of gardens for wildlife.
3. Influence residents' impact on gardens.

TARGETS

1.1 Obtain an estimate of the area of private gardens in Ealing from Planning etc.

2.1 Produce regular articles for inclusion in Around Ealing, and various newsletters i.e. Friends of groups.

2.2 Make Planning Committees aware of potential impact on wildlife of high density housing developments.

2.3 Publish results of the Garden Pond survey to highlight extent of wildlife in gardens.

2.4 Raise awareness with children (tomorrows gardeners) through poster competitions.

3.1 Launch poster campaign highlighting benefits of wildlife gardening and reduction of chemicals in gardening.

3.2 Encourage the Ealing In Bloom Competition to develop a Wildlife Gardening section from 2002.

3.3 Promote wildlife gardening at Countryside Weekend.

RAILWAY LAND - Habitat Statement

Railway land provides an excellent corridor for wildlife in Ealing, with much of the vegetation undisturbed. 14 key areas of railway land have been identified as the most important, or potentially important, for wildlife*.*

Railway land consists of corridors of vegetation (often broken up by gaps of hard surface) and also old structures such as bridges, tunnels and station walls that make excellent habitats for ferns and mosses as well as bats. The vegetation that develops is a mosaic of trees, bushes and grasses, the proportions depending on the management and the substrate. Track bedding can be of a variety of substrates, which can provide opportunities for plants normally associated with other habitat types. For example, several species of normally chalk loving plants grow on former rail land near Hill Rise. This results in a high level of diversity often within a relatively small area.

Nearly all railway lands in the Ealing borough area relatively undisturbed as management is infrequent and public access not generally allowed. Thus the land provides excellent habitats and their ecological value is further increased when their role as wildlife corridors is considered. Furthermore, they provide a pleasant and deceptively rural outlook for rail travellers.

14 main areas of railway land are identified in the London Ecology Unit (LEU) handbook as important for nature conservation. Some of the most interesting railway land is in the east of the borough, in densely urban areas like Park Royal, West Acton, North Acton and Acton Green where there are few other places of nature conservation significance. The LEU Handbook designates most of these sites as Grade II Sites of Borough Importance although there are a number of railway land sites that are Grade I or even of Metropolitan importance.

The Unitary Development Plan (UDP) identifies the following railway lines as important, or potential, Green Corridors in Ealing:

- Greenford Branch Line: major potential to act as a green corridor including the embankment from Greenford Station Viaduct through Perivale park to Hanwell cemeteries and Conolly Dell.

- Central Line: from Northolt station to North Acton.

- North London Line (Silverlink): from south of Willesden Junction through Gunnersbury station.

- Halsbury Road East & West and the Marylebone line.

- Southall Station to east of Acton Main Line.

- Piccadilly - Heathrow Line: Acton Town to Boston Manor station.

- District Line with Piccadilly-Rayners Lane line: Chiswick Park to Ealing Broadway & Park Royal.

- Brentford Line: from Southall station south-eastwards to the M4.

The priority for the current management of railway land is to ensure track safety. As a national policy for Railtrack, land is managed with a view to maintaining or enhancing the lands value to nature, but in practice this may need a more proactive approach (i.e.: removal of sycamore in nature woodland and removal of Japanese knotweed additionally to removals for safety reasons).

Current factors affecting the habitats include:

- Lack of management resulting in the presence or spread of invasive plants (such as Japanese knotweed).

- Loss of valuable old or dead trees overhanging rail line due to safety issues.

- Not all corridors are continuous and many have gaps of hard surface.

Standard Bearers/Quality Indicator Species include: salad burnet, greater knapweed, ash, pedunculate oak, elm, birch, hawthorn, crab apple, Lombardy poplar, elder, agrimony, rowan, willow, plum, hairy St. Johns wort, bird's foot-trefoil, herbs, ferns, blackcurrant, common blue butterfly, burnet moths, slow worms, common lizards, bats, birds.

OBJECTIVES ARE:

1. To maintain and enhance the nature conservation value of all areas of railway land in the borough in order to support the full and appropriate range of flora and fauna.

2. To integrate the conservation of natural and historic landscapes with the development of leisure pursuits and environmental education.

TARGETS:

1.1 Make links with Railtrack, London Underground Ltd. and Silverlink to ensure appropriate management of their land in view of increasing its value for nature (encourage them to seek advice on management).

1.2 To gain permission for London Borough of Ealing to manage specific areas of land for nature conservation. For example: Carr Road SLNC land (non-trackside), Half Acre Allotments and land near Whaynclife Embankment.

1.3 Ensure installation of bird/bat/hedgehog boxes on at least one suitable site owned by each London Transport landowner.

1.4 Collate existing ecological data of all railway land in the Borough to identify: any important flora or fauna; areas high in biodiversity; and to highlight future survey work which may need to be conducted to give an accurate picture of railway lands importance for wildlife in the borough.

RESPONSIBLE BODIES INCLUDE:

London Borough of Ealing (LBE),
Railtrack,
London Wildlife Trust (LWT),
London Transport (The Underground),
Silverlink Metro (North London Line).

7.0 SPECIES

7.1 The need to consider species

It is generally recognised that the best way to conserve species is by conserving the place where they live – the habitats. This principle underlies the approach in EBAP. Priority is given to establishing a plan – the Habitat Action Plan or HAP - for all the habitats where these species are or could be found. While a habitat and site-based plan forms the basis of the BAP, there is a need to consider individual species of plant and animal. Some species are in a vulnerable state in LBE and/or beyond and priority needs too given to these. Producing general-purpose action plans for habitats and hoping that this meets the needs of the priority species is not sufficient. The particular issues surrounding the species and its conservation requirements need to be addressed explicitly so that habitat and site management can be adjusted accordingly. Also, there may be policies and actions required which are outside the remit of HAP or site Management Plans.

7.2 Prioritising species

There is a vast number of species of plant and animal in LBE. There are dozen of birds, hundreds of flowering plants and thousands of insects. For many groups we do not even know what species we do have. Faced with the number of species and the many and various threats to them, it can be difficult to decide which species should be prioritised for conservation action.

7.2.1 Lists have been produced by the UK BAP Steering Group of species, which are threatened or declining:

- "Long list" of globally threatened or declining spp [ref]
- "Medium list"
- "Short List"

These represent the priority species for attention, the ones on the short being the highest priority. The last two lists have now been amalgamated to form a list of "priority spp" and may be found on the national BAP web site. As would be expected for a geographically small area such as LBE, there are few of the national priority spp in LBE. Even the number on the long list is small (although it should be pointed out that so little detail is known for some groups in LBE that there may well be species we have but don't know we have.) However, preservation of biodiversity is not just about protecting the most nationally rare and endangered spp. Even if a spp is fairly common and not threatened nationally, it may be rare or threatened locally. Protection of local populations is needed, both for the benefit of local communities and to preserve the national ranges and populations of species.

7.2.2 The first volume of the London BAP contains a “Species Audit”. This lists all the species which have some been categorised as rare or threatened or having some other special significance such as being indicative of a particular habitat or culturally valued. The occurrence or otherwise of each of these species in each borough is tabulated. This forms a useful basis for identifying possible priority species in LBE.

7.2.3 The prioritisation process has been taken a stage further for LBE. The analysis of species in the London BAP Audit has been used, but for each of the London criteria a ‘weighting’ has been applied. For example, a species that is nationally rare is given a top weighing of 6, while the criterion of “characteristic of London” is given a weighting of 1. In addition to the London BAP weightings, a number of other criteria have been added which appear relevant to the priority in LBE. In particular, the number the number of boroughs in London where the species occurs. The data has been entered on a spreadsheet and by marking each species against each criterion, a total score for that species was obtained. The higher the score, the higher the priority.

7.2.4 The weightings given to the various categories are subjective, but once these are defined, the prioritisation of species is objective and repeatable. This should help to limit the need for debate and consequent waste of time. Because the data has been entered on a spreadsheet, the prioritisation can be readily updated as new information comes to light.

7.2.5 The output of this process is a score for each species. These have been turned into a ranked list for each ‘group’ and an arbitrary rating of “Top Priority” given for species with a score of >12, “High” for 8-12 and “Medium” for below 8. The results are summarised below:

Group	Top	High	Medium
Mammals	water vole	pipistrelle bat	pygmy shrew
			hedgehog
			noctule bat
			weasel
Reptiles		grass snake	common lizard
		slow-worm	
Amphibians	gt crested newt	common frog	
Birds	sp flycatcher	turtle dove	cormorant
		song thrush	pied wagtail
		linnet	?sedge warbler
		bullfinch	tawny owl
		reed bunting	willow warbler

		hobby	goldfinch
		tufted duck	greater sp woodpecker
		mallard	great tit
		black redstart	common tern
		kingfisher	chiffchaff
		grey wagtail	blue tit
		mute swan	lesser sp woodpecker
		green woodpecker	treecreeper
		kestrel	+ 15 other species
Butterflies			green hairstreak
			speckled wood
			small heath
			gatekeeper
			small copper
			peacock
			common blue
			holly blue
			brown argus
			ringlet
			purple hairstreak
Macro moths			6 spot burnet
			Hawk moths
			Bulrush wainscot
			Garden tiger
Other insects		Ornosia bicornis	
Vascular plants		Black poplar (native)	Broad-leaved helleborine
		Opp lv golden saxifrage	Primrose
		Dyers greenweed	Rue leaved saxifrage
		Wild service tree	Yellow water lily
		Divided sedge	Ragged robin
		Marsh marigold	Hart’s tongue fern
		Bluebell	Pedunculate oak
		Ivy leaved water crowfoot	Budleia
			Rose bay willow herb
			False London rocket
			Mistletoe
			Spiked water milfoil
			Nr-lv water dropwort
			Sea Club rush
			Harebell
			+ some 60 other spp

Fungi	Antrodia pseudosinuosa		
	Orbilia fimicoloides		
	Aniptodera fusiformis		
	Sporodesmium ontariense		
	Coronicium alboglaucum		
	Hemimycena epichloe		

7.3 Species Action Plans

In principle, each of the species identified by this prioritisation process ought to be examined and a plan drawn up, if appropriate, for its conservation. However the above list is very long, so it is not possible to deal with every species. Also, it may well be the case that no plan is needed for many of the species. The lists of birds and vascular plants in particular are long and appear to contain species for which a plan is not needed.

7.3.1 Species Action Plans (SAPs) have been produced from a list of priority species. Other species such as the swallow and slow worm which are locally common but susceptible to changes in habitat have also been included. A number of species families have also had action plans produced for them, as it was not felt appropriate to distinguish between the various species at this stage. For species that are confined to 1 or 2 sites in the Borough it was not felt appropriate to produce an action plan, so statements are have been produced for these species. There are some key actions, which are generic to all these action plans and in order to reduce repetition in the plans these are listed here.

1 Monitoring of species. This is key to the development of management plans and where necessary the updating and amending of management plans. Monitoring systems should be set up when any activity or management to improve the species is planned.

2 Linked to the above recording of habitats and species is important and this should be carried out on key sites with the data being recorded on the London Wildlife Trust System.

3 Many of the actions listed in the SAPs will cost money. Before any of the planned actions are carried out the resources to properly undertake the work must be identified and secured.

4 Some changes in management activities may appear drastic to members of the public. Before any such management is carried out a community awareness strategy must be produced and implemented.

7.4 SPECIES ACTION PLANS PRODUCED ARE:

1. Bats
2. Birds of prey
3. Black poplar
4. Butterflies
5. Finches
6. Mistletoe
7. Mute swan
8. Slow worm
9. Song thrush
10. Swallow
11. Water vole

7.5 SPECIES STATEMENTS PRODUCED ARE:

1. Dyers greenweed
2. Fungi – general
3. Fungi – nationally rare
4. Wild service tree

BATS

Bats are the only mammals capable of true flight. Of over 1000 species world wide, 16 are resident in the UK, 8 in London and 5 species recorded in Ealing (2 pipistrelle species, Noctule, serotine and brown long-eared), although there are likely to be more.

All British bats feed on insects, in fact a single bat can eat over 3000 midges in an evening! Because of their food source, and also to avoid predation they feed at dusk and dawn. This habit, along with bad press has led to many public misconceptions about bats.

Because of their loss of natural roost sites (i.e.: woodland), many species have adapted to living in buildings and many Londoners discover unexpected lodgers for a few weeks in the summer, when females have their single baby and need somewhere warm to raise their young. In the winter they hibernate and depending on the species they can live up to 30 years.

1. CURRENT STATUS

1.1 IMPORTANCE

Little is known about the current status of most species nationally and locally, but evidence points towards massive declines in most species. In 1990 the Greater Mouse-eared bat was declared extinct in the UK (the last male was recorded in February 1986), the first mammal since the wolf. Because of their complex ecological requirements, bats are highly sensitive to environmental change and thus an excellent indicator of environmental quality.

1.2 TRENDS

Older generations talk of seeing clouds of bats at dusk, a rare sight these days and the available evidence does suggests an overall decline in populations. The pipistrelle (both species) is thought to have declined nationally by an estimated 70% between 1978 and 1993 (Harris *et.al.* 1995).

A recent repeat survey in London found that there has been a statistically significant decline in the bat population of Greater London since the mid-1980s, particularly of noctules, Leisler's bats and serotines (Jones, *et al*. 2000 in prep)

1.3 DISTRIBUTION

Only 2 roosts have been recorded in Ealing since the 1980s (both pipistrelle species), with only 3 other possible roosts recorded. However, bats have been observed feeding all over the Borough suggesting more roosts are present. The most recent record is from

1995, subsequent surveys have not indicated a presence of bats. This serious decline should be a wake-up call to us all.

2. FACTORS AFFECTING THE SPECIES

2.1 Loss of maternity roost sites in buildings or trees

Through disturbance, damage or destruction to roosts, resulting from a lack of public awareness and understanding of bats, and the legislation protecting bats (often leading to the legal consultation process being ignored

2.2 Loss of and disturbance to hibernation and other seasonal roost sites

For the same reasons as 2.1. Roost sites include buildings, trees, bridges and underground sites.

2.3 Loss of feeding habitats

Caused by changes in land use, resulting in the loss of insect-rich feeding habitats such as wetlands, woodlands and grasslands.

2.4 Disturbance to commuting routes

Flight paths to and from feeding areas/roosts may be disturbed through the loss of flight line features such as green corridors or through introduction of new features such as lighting.

3. CURRENT ACTION

3.1 PROTECTION

All 16 species of bat in the UK are protected by the Wildlife and Countryside Act 1981 (Schedules 5 and 6 as amended) and under Schedule 2 of the Conservation (Natural Habitats, etc) Regulations, 1994. The latter further implements European legislation (Annex Iva and II of the 1992 EC Habitats and Species Directive) protecting bats.

PPG9 (Planning Policy Guidance: Nature Conservation, 1994) refers to the need to consider protected species, including all species of bat, in Unitary Development Plans.

All UK bat species are included in Appendix II of the European Convention on the Conservation of Migratory Species of Wild Animals (Bonn, 1979), including its Agreement on the Conservation of Bats in Europe (London, 1994). While this Agreement is not a legal instrument, the UK is obliged to abide as signatories.

The 1979 Bern Convention also lists all UK species in Appendix III, and all except the pipistrelle are listed in Appendix II; implications for some species arise from certain subsequently agreed Recommendations adopted by meetings of the Parties.

3.2 MANAGEMENT

Through the Wildlife & Countryside Act a network of licenced bat wardens are working, in liaison with English Nature, to safeguard bat roosts, particularly in houses. There are currently 2 active bat wardens in Ealing.

Surveying in Ealing has so far been minimal and little has been done to promote the place of bats in London life, although LBE rangers run an annual guided bat walk at Brent River Park.

Bat box schemes have been implemented on a few LBE Parks and Open Spaces around the Borough, and in residents private gardens. Although their success in Ealing has not been monitored, national guidelines suggest most schemes are unfortunately not successful in providing alternative roosts for bats although they do provide an opportunity for increasing public awareness.

4.1 OBJECTIVES

1. To increase knowledge of the distribution, population and species of bat within Ealing.

2. To raise awareness of bats specialised requirements and habits with key audiences in the Borough such as land managers, tree contractors and planners.

3. To protect and create suitable feeding habitats, roost sites and commuting routes for bats in Ealing.

4. To increase public awareness of bats within the local community, and promote involvement in their conservation.

5. TARGETS

Short term targets (0 - 5 years)

1.1. Research and collate any relevant historical/current records for bats in Ealing. *LBE-2001*

1.2. Survey potential sites for bat presence based on standard techniques used by the LBG and BCT. *Rangers, Volunteers , land managers-On-going*

2.1. Promote Bat Advice Note to all planners (available from BCT).*LBE-2001*

2.2. Promote best practice to tree contractors and wardens through information dispersion (letters and leaflets) *LBE-2001*

2.3. Encourage land managers and owners in good practice to ensure that suitable sites for bats are in optimal condition to receive colonies. *LBE-On-going*

3.1. Identify at least 2 suitable sites for roost creation, erect bat house/boxes and monitor. *LBE-2002*

3.2. Ensure bats are considered in all relevant Habitat Action Plans. *LBE-2001*

3.3. Encourage linking of suitable feeding and roosting sites with green or dark corridors. *LBE-On-going*

4.1. Encourage potential bat walk leaders and surveyors to attend training courses in bat detection. *LBE-2002*

4.2. Initiate training for bat box inspection licences for appropriate land managers. *LBE-2002*

4.3. Increase programme of guided walks, illustrated talks and written articles in Ealing. *LBE-On-going*

4.4. Carry-out 'Battitude' projects in at least 2 key areas to establish further records of bats and increase public awareness. Forms are available through the LBG, suggested sites include Fox Wood LNR and Brent River Park. *LBE-2002*

Medium term targets (5 - 10 years)

1.3. Establish a long term monitoring programme for bats in Ealing.*LBE-2005*

5. RESPONSIBLE BODIES

London Borough of Ealing (LBE), English Nature (EN), Greater London Authority (GLA), London Wildlife Trust (LWT), London Bat Group (LBG), Bat Conservation Trust (BCT).

6. COMPLEMENTARY PLANS

National Action Plans:

Pipistrelle bat, various Habitat Action Plans.

London Biodiversity Action Plan.

LBE Habitat Action Plans:

Woodlands; Canals; Gardens; Grassland, Meadows; ponds; churchyards and cemeteries; railway land; Amenity grasslands; hedgerows

7. REFERENCES

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Johnson, Walter. FGS. 1930. *Animal Life in London*. The Sheldon Press, London.

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BIRDS OF PREY

Red Kite *Milvus milvus*, Sparrowhawk *Accipiter nisus*, Buzzard *Buteo buteo*, Kestrel *Falco tinnunculus*, Hobby *Falco subbuteo*, Peregrine *Falco peregrinus*

Birds of prey are magnificently adapted and impressive predators at the top of the food chain. Their populations have been severely depressed in the past by deliberate persecution by gamekeepers and others which continues in some areas today. For some species, a marked and lasting contraction in range also occurred. From the 1950's onwards persistent chemical residues mainly from organochlorines used in agriculture greatly reduced bird of prey breeding success and therefore populations. Following the withdrawal of the majority of these substances those species most affected have largely recovered their numbers and most of their former range. Re-introduction has also been successful in the return of Red Kites where the past reduction in numbers and range was so drastic that the gene pool was affected. The status of most species in Ealing is probably largely dependent on factors outside the Borough.

1. CURRENT STATUS

At present sparrowhawks and kestrels nest reasonably commonly in suitable sites throughout the Borough. Hobbys also nest but are restricted to the west of the Borough and to larger areas of suitable open space. The other species do not yet nest, but buzzards are occasionally seen and are likely to re-colonise naturally as they re-occupy their historic range prior to persecution. Peregrines are also recovering from pesticide induced range contraction and have just re-colonised London. It is likely that nesting could be encouraged in Ealing by the provision of suitable safe nesting sites. (Prey, in the form of feral pigeons, is already abundant!) red kites, spreading from re-introduction centres in the Chilterns, are likely also to occur in Ealing as the population expands, and could well nest in suitable large areas of open space in the west of the Borough.

2. MAIN THREATS

Deliberate persecution of birds and nests is the main threat in Ealing. The most likely threats are from poachers who shoot, trap or hunt illegally on open land.

3. OBJECTIVES

1. To maintain breeding populations of each species in Ealing, occupying all suitable territories.
2. To ensure that birds and their nests are protected.
3. To provide and maintain suitable habitats and nest sites.
4. To involve landowners and the public in the conservation of birds of prey.

4. TARGETS

1.1. Ensure Ranger patrols are targeted at vulnerable or new sites and appropriate action taken to reduce or remove threats to birds of prey or their nests.

2.1. Continue to prevent illegal shooting, trapping and hunting on Council-owned land in the Borough, and take enforcement action when incidents occur.

3.1. Continue to provide kestrel boxes for suitable buildings throughout the Borough.

3.2. Provide peregrine boxes for selected buildings throughout the Borough.

1.2. Establish one or more feeding stations for red kites if necessary subject to English Nature approval.

4.1. Monitor breeding success by supporting the marking of a sample of nestlings each year as part of the British Trust for Ornithology ringing scheme.

4.2 Work closely with the West London Members' Group of the RSPB to inform and involve local people in the conservation of birds of prey.

5. PARTNERS

English Nature, West London Members' Group RSPB, British Trust for Ornithology.

BLACK POPLAR *populus nigra ssp betulifolia*

The native black poplar *Populus nigra* ssp betulifolia is nationally rare and not to be confused with the introduced Italian black poplar and hybrids. Until recently the black poplar was largely a forgotten tree. For example many of the elm trees that appear in John Constable paintings are thought to be black poplars. Usually found in wet areas typically along side streams and rivers, they are characterised as they get older by their large, often leaning appearance with massively arching down curved branches and heavily burred trunks. In the spring red and green catkins are produced respectively by the male and female trees. Often hybrid black poplars are mistaken for the now rare native black poplar.

In the past black poplar wood has been used in mill buildings and for brake-blocks as it is heat and fire resistant. It was also used for wagon bottoms and to make rifle butts in the First World War, so taking advantage of its shock absorbent properties. Thin branches from pollards have been used for hurdles and fruit baskets in place of hazel and willow.

River valleys are one of the habitats that have been most intensively developed for agricultural and urban use. As a result, the black poplar has become increasingly rare, but it is sometimes to be found by streets and in parks.

1. CURRENT STATUS

1.1. IMPORTANCE

National : internationally or nationally scarce
London : locally rare or threatened ; characteristic of London ; in c20 boroughs
Ealing: only a handful of trees are known in the borough.

1.2 DISTRIBUTION IN UK AND EUROPE

The Atlantic form of the European black poplar is confined to Britain, Ireland, northern France and part of western Germany. It is found mostly in lowland river flood-plains but locally can occur on higher ground beside streams and ponds.

In Britain most trees are found south of a line from the Mersey to the Humber estuaries. There are concentrations in the low hundreds along the River Seven, Shropshire, Somerset, Suffolk and Aylesbury Vale which has about 5000, perhaps half of the total British population. The number of individual clones is thought to be small, perhaps in the hundreds. This remains a mater of research.

Apart from recently planted cuttings most black poplars are thought to be in excess of 100 years old with perhaps the oldest reaching 300 years plus in age. There are a few examples of seedlings from sites where both male and female black poplars occur together. Due to the possibility of

contamination for hybrid pollen it is likely that the seedlings are hybrids.

The generally elderly age profile, its rarity and probable inability to reproduce sexually has merited its inclusion in the Red Data Book for Vascular Plants where it is described as “Vulnerable”.

1.3 DISTRIBUTION IN LONDON

Currently, numbers in London are unknown, but it appears to be rare. In common with other parts of the country reports need to be treated with caution as misidentification with hybrid black poplars is commonplace. Trees have been reported from 20 London boroughs with concentrations along the River Thames in the London Borough of Richmond and Hainault Forest Country Park in the London Borough of Redbridge.

Much work needs to be done in checking existing records and new surveys. It is not known how many clones of black (or hybrid) poplars are being planted, likewise it is not known how many are being felled or are succumbing to old age and dereliction.

1.4 DISTRIBUTION IN EALING

There are only a handful of trees known in the borough. There may some, which have not been noticed or not reported, but it is unlikely that the numbers are at all large.

2. FACTORS AFFECTING THE SPECIES

The biggest threat to the poplar is likely to be felling due to development or other major works e.g. road works. Some of the few black poplar trees that are known from LBE are isolated trees that are in habitats such as fields or roadsides which are not necessarily well protected. Isolated trees, being a small component of other habitats such as fields or river margins, tend to be more vulnerable than trees in a woodland precisely because they are a small part of the habitat. They may be considered at best an irrelevance and at worst a nuisance, being in the way.

Because black poplars are large and have big boughs and they occur close to where people may pass, they may be vulnerable to over-zealous lopping. Due to concerns about safety and legal action, land owners and managers are managing their estates in an increasingly cautious way and this could lead to the felling or pollarding of dangerous black poplars. Simply tidying up fallen trees and branches, irrespective of perceived safety issues, may have prevented trees regenerating from those trees or branches.

The drainage of lowland areas has lead to a reduction of the water table. In some areas this may put some individual trees under stress. The ability of seed and seedlings that rely on moist land to survive is also negatively affected. Our generally warmer and dryer summers may also be a

contributing factor, but in London generally rising water tables may benefit black poplars.

In the longer run, regeneration is a major issue. With so few plants around and so few natural habitats surviving where saplings may grow, there must be concern as to whether the population is viable without intervention.

Because of the likelihood of cross-pollination from the widespread plantings of hybrid poplars it is questionable if any true black poplar seed will be produced in the wild.

The fact that the tree is not well known and looks similar to the more common and familiar hybrid black poplars means that land managers may not know they have it and could inadvertently damage or destroy trees.

3. CURRENT ACTION

3.1 LEGAL STATUS

Under the Wildlife and Countryside Act 1981 it is an offence for unauthorised persons to uproot black poplar trees. Individual trees may be protected by Tree Preservation Orders (TPOs), administered by local authorities.

3.2 NATIONAL AND LONDON MECHANISMS TARGETING THE SPECIES

In London, Countryside Stewardship and the Woodland Grant Scheme is probably not directly helping black poplars. It is likely that Local Authorities resources are being used for tree surgery work perhaps without knowledge of the trees significance.

A national black poplar working group was formed in the early 1990=s and English Nature on behalf of the group produced >An Action Plan for its Conservation (Spencer 1994) .

There are a number of local initiatives based in Aylesbury Vale, Essex/Suffolk, Norfolk, Shropshire and Somerset. Clone banks have been established in Aylesbury Vale and Essex/Suffolk. Regular meetings of people from various parts of the country who are working with black poplars are being held twice a year.

Genetic research is currently being undertaken at the Universities of Nottingham and Edinburgh. There are at least two methods being used to ascertain the genotype of black poplars. Research is also taking place in 8 European countries.

4. OBJECTIVES

1. To protect all existing trees in the short term.

2. To increase the population in the longer term.
3. Ascertain, maintain and increase the genetic diversity.

5. TARGETS

Short term targets (0-5 years)

1.1. Produce a database recording the following details for all know trees: precise position, condition, sex, environs and photographs.

1.2. Tree preservation orders achieved for all known trees.

1.3. All relevant landowners, managers and contractors aware of the trees importance and ecological requirements.

2.1. Collate historical information on *populus nigra* ssp. *betulifolia* relevant to Ealing, including previous regeneration attempts.

2.2. Establish a working partnership with The Black Poplar Action Group and relevant contacts within the London Black Poplar Action Plan.

2.3. Identify appropriate sites and produce a plan for regeneration of black poplar within Ealing.

3.1. Supply information from 1.1. and samples for genetic fingerprinting to the Black Poplar Action Group, Botanical Society of the British Isles and relevant contacts within the London Black Poplar Action Plan group.

Medium term targets (5-10 years)

3.2. New planting sites identified and planted with on-going maintenance, protection and monitoring.

Long term targets (10-15 years)

3.3. Establish a nursery for black poplar trees in Ealing (subject to the results of regeneration planting).

3.4. Produce a feasibility study on possible uses for black poplar timber, sourced from trees planted in the borough (subject to the results of the regeneration trials).

6. RELEVANT PLANS

1. London SAP for black poplar
2. LBE HAP for river streams and canals
3. LBE HAP for parks and amenity grassland
4. LBE HAP for neutral and marshy grasslands
5. Borough Tree strategy

6. Borough forest strategy

7. REFERENCES

1. London SAP for black poplar
2. *Red Data Book for Vascular Plants* 3rd Edition.
3. Spencer (1994) The Native Black Poplar in Britain: An Action Plan for its Conservation English Nature, Newbury.

BUTTERFLIES *order Lepidoptera*

Butterflies are insects belonging to the order Lepidoptera, meaning scale-wing. Most are found living in woodland, grassland, heathland and hedgerow habitats. The majority of species in Britain live and breed in localised colonies, some travel throughout the countryside. Migrants regularly fly over in the Spring from Southern Europe and North Africa, to breed here over Summer. Adult butterflies feed on nectar from flowering plants, or honeydew secreted by aphids. Most eggs are laid on a single plant type.

1. CURRENT STATUS

1.1 IMPORTANCE

Butterflies are highly sensitive to environmental change within habitats, and over the last 60 years many species have declined rapidly due to a number of factors (see below). Butterflies feed on a wide variety of wild plants, although several species are dependent on a few or only one food type. Habitat loss or change can drastically affect the availability of these plants, and therefore the number of butterfly species associated with these.

1.2 TRENDS

Nationally, several species of butterfly have been declared extinct since the beginning of the last century, and many species are vulnerable.

Since 1986, three species have become extinct in the Hertfordshire and Middlesex area, of which Ealing is a part (wood white, pearl bordered fritillary, high brown fritillary), two have no known colony (dark green fritillary, silver washed fritillary) and two more have only one remaining colony (small blue, Duke of Burgundy).

In Ealing, Wall brown, green hairstreak and brown hairstreak (4 or less Colonies in the Herts / Middx area) are probably now extinct).*

1.3 DISTRIBUTION

About 22 species of butterfly can be found in different habitats throughout Ealing.

2. CURRENT FACTORS AFFECTING THE SPECIES

1. Destruction of habitats (particularly lowland habitats) for farming and building, including hedgerow removal, woodland removal and land drainage.

2. Climate changes e.g., adverse temperature changes affecting food types and distribution.

3. Use of insecticides and herbicides on farmland and in parks, open spaces and gardens.

4. Fragmentation and isolation of populations.

5. Destruction of habitat either directly or indirectly, through disease or lack of management e.g., Dutch elm disease, myxomatosis (decline in rabbit populations affecting grassland species), neglect of previously managed woodland and grassland.

3. CURRENT ACTION

3.1 PROTECTION

Apart from restrictions regarding their sale, none of the species found in Ealing are included under any protective legislation.

3.2 MANAGEMENT

Many areas of public open space owned by LB Ealing are increasingly being managed with nature conservation in mind, (such as late cutting of areas of grass margins in some parks, planting of hedgerows, active management of woodland). Management plans are being written up for several sites covering differing habitat types, and butterfly transects are being established in several sites within the borough.

4. OBJECTIVES

1. To collate existing data on butterflies and their habitats within the LBE, with regard to past records from the local branch of Butterfly Conservation and other sources, to assess population changes and appropriate future action.

2. To monitor and advise on any proposed planning/land management issues that may affect butterflies and their habitats.

3. Create habitat enhancement of degraded sites, such as creating/restoring links with currently fragmented/degraded habitats and butterfly populations, (e.g. introducing wildflower areas to parks/open spaces across the borough),and monitoring the success (or otherwise) of this work.

4. To increase local knowledge of butterflies found in Britain and Europe, with the emphasis on local species and their habitats. This could be achieved through involvement with the following: Hertfordshire and Middlesex branch of Butterfly Conservation, Hounslow and Ealing Conservation Volunteers, Ealing Wildlife

Network, regional representatives of London Wildlife Trust, and the local media.

5. TARGETS

Short term targets (0-5 years)

1.1. Collate any relevant information concerning butterflies and their habitats in Ealing.

1.2. In conjunction with the local branch of Butterfly Conservation. Increase monitoring programme for species found in the borough.

1.3. Create 3 transects in individual open spaces in the borough (1 Acton Area, 1 Horsenden Hill Area, 1 Brent River Area).

2.1. Leave existing areas of long grass margins in parks/open spaces uncut until late summer. Explain to public the significance of these areas.

2.2. Investigate the potential for the creation of larger areas of wildflower/meadows in15 areas of park/open space/Housing land.

2.3. Reduce/phase out use of pesticides/herbicides in all parks/open spaces.

3.1. Continue implementing coppice rotation on selected sites managed by the council.

3.2. Plant up 15 new hedgerows made up of native tree species in parks/open spaces across the borough

3.3. In conjunction with Parks contract managers, investigate 6 selected parks across the borough with a view to planting shrubs /flowers in beds to encourage butterflies.

4.1. Produce leaflet about butterflies found in Ealing to raise awareness and to encourage sympathetic gardening practices.

4.2. Carry out a butterflies in gardens survey to find out about species visiting gardens and allotments in the borough.

Medium term targets (5 - 10 years)

3.4. Reduce habitat fragmentation by linking as many habitats as possible across the borough (e.g. woodlands with hedgerows, hedgerows with grassland etc).

3.5. Investigate the opportunity to acquire land where needed in order to achieve above.

3.6. Assess population fluctuations using monitoring programmes (e.g. transects), and manage habitats accordingly**.**

3.7. Plant up 18 new hedgerows made up of native tree species in Parks /open spaces across the borough.

3.8. Complete implementation of elm coppice rotation cycle on all sites.

Long term targets (10 - 50 years)

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1.4. Continue to monitor local populations and to manage new and existing habitats accordingly.

2.4. Continue to increase areas of wildflower/grass meadows in parks /open spaces managed by the council.

3.9. Continue to link up habitats in the borough.

3.10. Continue to plant up new hedgerows and maintain/lay existing hedgerows across the borough.

6. RESPONSIBLE BODIES

London Borough of Ealing (LBE), Butterfly Conservation (BC), English Nature (EN), Greater London Authority (GLA), London Wildlife Trust (LWT), Railtrack, London Underground (LU).

7. COMPLEMENTARY PLANS

LBE Habitat Action Plans:
Railway Land, Woodland, Cemeteries and Churchyards, Hedgerows, Neutral and Marshy Grasslands, Amenity Grassland.

Butterfly Conservation Herts /Middx Branch Annual Report 1999, J Murray & Souter.

FINCHES, BUNTINGS AND SPARROWS

House sparrow *Passer domesticus*, tree sparrow *Passer montanus*, linnet *Carduelis cannabina*, bullfinch *Pyrrhula pyrrhula*, yellowhammer *Emberiza citrinella*

It is easiest to consider the five species of seed-eating birds grouped under this action plan together, even though their population trends and current status in Ealing differ markedly. Two have suffered declines and two are lost as breeding birds in Ealing, while one species has maintained its numbers. The broad policies and possible actions under this plan would appear to be common to all species.

1. CURRENT STATUS

Although house sparrows have been subject to a long-term decline in central London, the species' population was probably stable in the suburbs until the sharp recent decline, which mirrors the national reduction. House sparrows are still common breeding birds in Ealing, but in noticeably smaller numbers. Tree sparrows were rare breeding birds in Ealing until perhaps the 1980's but are now no longer found at all in the Borough. Linnets are common breeding birds in the major open areas of Ealing and numbers are thought to be relatively stable. Bullfinches are less common breeding birds in Ealing and numbers have declined, but starting rather later than the national trend. Yellowhammers are long lost as breeding birds in Ealing, but are still present on farmland to the west.

2. MAIN THREATS

Changes in agricultural practice have significant and widespread effects nationally on the seed eating birds grouped in this plan. Patterns and timing of sowing and cropping, degrees of wastage and spillage and the extent of under managed or set-aside land all impact on food availability for granivorous birds outside London. It is difficult to see how such factors could impact on these species' populations in Ealing now that there are almost no farms remaining, but with other birds including skylarks *Alauda arvensis*, Ealing has seen the same population trends as on farmland. It is unlikely that actions within the Borough will be effective unless actions on farmland improve the availability of grain or weed seeds more generally. Bullfinches increased in numbers during the period of depressed sparrowhawk populations due to poisoning from persistent organochlorine pesticide usage from 1957 until the mid 1970's, and it was not until the early 1980's before sparrowhawk numbers recovered in London. The decline of bullfinches became noticeable in Ealing only in the 1990's. Both bullfinches and Linnets feed on a wide variety of weed seeds and both seem to benefit from the Nature Conservation Management Plans implemented on many sites in Ealing. As commensals of man, house

sparrows may be affected by losses of nest sites due to better standards of housing or reductions in food supply either as waste or at bird feeders, but the recent decline is difficult to link with any obvious changes. A new suggestion is that the national decline in aphids, which may be a critical food for house sparrows at a certain time of year, could be a factor. Yellowhammers and tree sparrows are unlikely to return as breeding birds in Ealing unless more diversity can be introduced into the management of the larger open areas in the Borough. A combination of creating arable areas to provide a range of seeds especially to maintain flocks of granivorous birds in winter, and the return of grazing animals, would seem to be needed to restore habitats and food supply for these birds.

3. OBJECTIVES

1. To maintain granivorous bird populations of a wide range of species in Ealing.
2. To publicise the decline in house sparrows to promote a wider awareness of birds in Ealing.

4. TARGETS

1.1. Prepare feasibility study for change to low-intensity natural grazing using primitive horses and cattle on Council-owned meadow sites currently cropped by machine.

1.2 Continue to create and maintain areas of arable land for seed-eating birds.

1.3. Encourage the British Trust for Ornithology to continue with their ringing scheme of birds using specific sites (Long Wood, Elthorne Waterside, Greenford Island and Carr Road).

2.1. Work with Ealing Wildlife Network to prepare information on house sparrows.

5. PARTNERS

Ealing Wildlife Network, British Trust for Ornithology.

MISTLETOE *Viscum album*

Mistletoe is a woody dioecious evergreen parasite that grows on deciduous trees. It has elongate paired leaves, wider above the middle and with blunt tips. The leaves are carried on branchy dull green stems. It has inconspicious compact clusters of green flowers. In November and December its sticky white buds ripen.

Host trees favoured by mistletoe are lime and members of the *Rosaceae* family including hawthorn, whitebeam, rowan and especially apple.

There are various mystical powers and medicinal properties associated with mistletoe, including the ability to provide fertility. It is likely that the Christmas tradition of kissing under the mistletoe has its basis in such folklore.

1. CURRENT STATUS

1.1 IMPORTANCE

As indicated above the plant has historical and cultural importance. Mistletoe, a parasite itself is also a host to four species of mistletoe-dependant insects. The current state of these insects in London is unknown.

1.2 TRENDS

It was thought that mistletoe was nationally in decline.

In the 1990s a nationwide survey was carried out and the subsequent report published jointly by Plantlife - The Wild-Plant Conservation Charity and The Botanical Society of the British Isles. The report indicated that mistletoe had maintained its presence in its favoured regions and habitats. It also appears to have increased in some areas.

Mistletoe seems to have adapted to man made habitats such as parks, gardens, orchards and linear tree features such as hedgerows, waterside and roadside trees.

However the species is scarce in the Greater London area.

1.3 DISTRIBUTION

Currently it would appear that there are only a small number of mistletoe populations within Ealing. There are however numerous trees and habitats which would appear suited to the species. The existence and extent of previous surveys within the borough is currently not known.

2. FACTORS AFFECTING THE SPECIES

1. Mistletoe is not covered by any legal protection or conservation policies. There is no national species action plan. A mistletoe action plan has been produced for the London Biodiversity Action Plan (LBAP).

2. Tree and habitat management may be either knowingly or unknowingly be damaging for mistletoe.
3. Changes in winter populations of mistletoe berry-eating birds may have an effect - mistle thrushes may be decreasing, but overwintering blackcaps may be increasing. These berry eating-species are the principle means for mistletoe to spread.

4. Unsustainable harvesting may affect the species. The loss of traditional harvesting as a control technique has been suggested as another threat.

3. CURRENT ACTION

3.1 PROTECTION

Mistletoe has no direct protection. Some trees with Tree Preservation Orders may have mistletoe, however the designation is incidental to the presence of the species.

3.2 MANAGEMENT

With the exception of the recent LBAP and Ealing mistletoe species action plans there are no current management or policy statements/plans.

However the London Borough of Ealing's management of parkland, veteran trees and other areas of conservation interest provide positive opportunities for the species.

4. OBJECTIVES

1. To collate any existing data on mistletoe within the LBE.
2. To protect the current populations of mistletoe within the borough.
3. To increase mistletoe population in Ealing by restoring populations at sites where mistletoe was or is likely to have been present.
4. To increase mistletoe population in Ealing by identifying appropriate new sites for the introduction of mistletoe.
5. To gain and distribute knowledge of mistletoe ecology, and cultural history.

5. Targets

Short term targets (0 - 5 years)

1.1. Produce a database and or report collating any relevant historical/current information on mistletoe in Ealing.

1.2. Liaison achieved with relevant contacts within the LBAP mistletoe group in order to ensure exchange of mistletoe data.

4.1. Agreement established on the possibility of designating trees with mistletoe populations with TPO's.

4.2. Include where practical protection within Ealing's Unitary Development Plan trees or habitats known to contain mistletoe populations.

3.1. Guidance information collated on mistletoe establishment including genetic appropriateness.

3.2. Select and introduce mistletoe at two sites where the species was or is likely to have been present.

3.4. Select and introduce mistletoe at two new sites that are appropriate for the species.

3.5. Monitor the above introductions.

4.1. Leaflet produced that includes basic identification, ecology and history of mistletoe.

4.2. Leaflet distributed to relevant land owners/managers, contractors and interested parties.

Medium term targets (5 - 10 years)

3.6. Monitor the above introductions and continue/modify the project as needed.

4.3. Report produced that contains all known information on current status, cultural research, details of regeneration projects and the results of monitoring those projects.

Long term targets (10 - 50 years)

3.6. Continue introductions and monitoring of mistletoe populations as needed.

6. RESPONSIBLE BODIES

London Borough of Ealing (LBE), Greater London Authority (GLA), London Wildlife Trust (LWT), London Natural History Society (LNHS),

London Biological Records Centre (LBRC), Botanical Society of the British Isles (LSBI), Greater London Tree Officers Association (GLTOA).

7. COMPLEMENTARY PLANS

A mistletoe action plan has been produced for the London Biodiversity Action Plan (LBAP).

MUTE SWAN *Cygnus olor*

Mute swans are large and conspicuous birds that attract attention and are valued by people who see them swimming along our waterways or flying with the characteristic sound of their wings. Ealing's swans are generally approachable and often obtain a significant amount of their diet in the form of bread from people. They are correspondingly easy to monitor.

1. CURRENT STATUS AND OCCURRENCE

The mute swan is a common breeding bird in the London area, occurring along rivers, on gravel pits, lakes and ponds, wherever secure nesting sites are available (Montier 1977). Following the introduction of the ban on the use of lead fishing weights in 1987, the mute swan population has recovered dramatically on the River Thames, and the number of territories in Ealing has increased. In Ealing, sites along the Grand Union Canal including ponds and to a lesser extent the River Brent are utilised by this species, although there are still apparently suitable sites in the Brent Valley which are not occupied, including one fishing lake.

2. MAIN THREATS

Disturbance either to the birds or to the nest site is probably the main factor determining breeding success. While most established sites are relatively secure, fencing the landward side of vulnerable nests may greatly reduce disturbance from both people and dogs. Involving local people in watching over nest sites, and regular checks by Rangers are to be encouraged. Angling is an indirect threat because of the risk of birds swallowing or becoming entangled in fishing tackle, and deliberate disturbance by anglers probably prevents colonisation of at least one site. Collisions with objects is one of the main hazards to swans, but Ealing is surprisingly uncluttered by cables and wires in the vicinity of those areas most used by swans. The IBA mast at Glade Lane Canalside Park may be an exception. Water quality in the River Brent and the scour associated with urban flows may affect the number of potential territories, but more probably the lack of suitable nest sites is the limiting factor. Restoring or creating appropriate features such as islands may provide new nest sites. Oil pollution in the River Brent regularly affects swans on Fitzherbert Walk and may prevent the establishment of a breeding pair at that location.

3. OBJECTIVES

1. To maintain a breeding population of mute swans in Ealing occupying all suitable nest sites.
2. To restore or create new nest sites where feasible.
3. To monitor the breeding population of mute swans in Ealing.

4. To involve local people and Rangers in protecting vulnerable nest sites.
5. To ensure that disturbance by anglers where occurring is investigated and remedied.

4. TARGETS

1.1. Continue to work with the Environment Agency and British Waterways to conserve and protect existing nest sites.

2.1 Continue to work with the Environment Agency to create new nest sites where appropriate.

3.1 Encourage the British Trust for Ornithology to continue their ringing scheme, which monitors breeding success by checking adults and marking cygnets each year.

4.1 Identify sites where local people watch over breeding swans or could be encouraged to do so.

5.1 Identify where disturbance by anglers may be occurring and remedy where possible.

3.2 Monitor mortality/morbidity from collisions, oil pollution and other causes with the National Swan Sanctuary and reduce/remove hazards where possible.

6. PARTNERS

Environment Agency, British Waterways, National Swan Sanctuary, British Trust for Ornithology.

SLOW WORM *Anguis fragilis*

Slow worms are often mistaken for snakes because there is a superficial resemblance; however slow worms are in fact lizards that have lost their legs during the evolutionary process. An easy way to distinguish between the two is that slow worms have eyelids, while snakes do not. Individuals can measure up to 50cm long, they are shiny in appearance, with a light brown back and dark strips on the side. They feed on slugs, earthworms and other soft-bodied invertebrates. They live in moist shady places, and like all cold bodied animals they bask in the sun to warm themselves; however they tend to remain partially hidden, camouflaging themselves with leaves or matted grass. Slow worms hibernate during the winter months and females give birth to live young that are incubated in her body. Young are born around August/September time, in broods of 5 - 15.

1. CURRENT STATUS

1.1 IMPORTANCE

There are only three species of lizards in Great Britain - the slow worm, the sand lizard and the common lizard. Numbers of slow worm populations have decreased recently in the countryside due to pressures on their habitats; as a result conservationists are now turning to urban areas to provide suitable habitats for these shy creatures.

1.2 TRENDS

Slow worms are a widely distributed species, they are found throughout Great Britain (except Ireland) as far north as the Hebrides. They cover a wide range of habitats, for example woodland rides, grassland and meadows, hedgerows and heathlands, gardens, railway embankments, churchyards, road verges and allotments.

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1.3 DISTRIBUTION

While there have been no recent schemes to monitor the distribution and numbers of slow worms in Ealing, there was a study undertaken in 1990, the results of which were edited by Clive Herbert. These records show that slow worms were widespread and locally abundant in the London area. There were populations of slow worms and common lizards on the Guinness estate in the east of the borough. Due to urban development the slow worms were relocated to Blondin Nature Area, and the lizards to Horsenden Hill. There are also historical records of two populations of slow worms in the Perivale area. Recent informal accounts suggest that there are many populations distributed in the North and West of the borough.

2. FACTORS AFFECTING THE SPECIES

1. Habitat loss due to urban encroachment.

2. Habitat loss due to intensification of farming methods.

3. Habitat degradation through lack of/ artificial/unsympathetic land management, e.g regular mowing and strimming of grass areas, allowing rides to become shady woodland areas.

4. Poisoning through the use of pesticides (in gardens, allotments, road and railway verges) and possibly through direct toxicity by eating poisoned slugs (in gardens and allotments).

5. Isolated and fragmented populations.

6. Predation in urban areas by domesticated/feral cats.

7. Ignorance and fear - slow worms are often mistaken for snakes by members of the general public and killed.

3. CURRENT ACTION

3.1 PROTECTION

Slow worms are certainly occurring less frequently than they once were, they are protected under the 1981 Wildlife and Countryside Act Schedule 5; which protects them from being killed, injured or sold.

3.2 MANAGEMENT

Slow worms are currently found in some of the London Borough of Ealing's 'conservation' areas, and policies have been incorporated into the management plans to actively encourage the maintenance and growth of the slow worm populations. In other areas there are no provisions for the management of sites for slow worm populations.

4. OBJECTIVES

1. To implement a comprehensive population distribution survey, and continue with a population survey/monitoring programme.

2. To actively encourage population growth through habitat enhancement and beneficial management of existing sites with slow worm populations.

3. To create more suitable habitats for slow worm populations especially in the Ealing/Acton area (where there is only one population known to the Parks and Countryside Rangers).

4. To raise the profile of slow worms in order to encourage gardeners/allotment holders etc. towards sympathetic

management of their land; and their mistreatment through ignorance.

5. Reduce the use of pesticides and poisons used within the borough that are detrimental to slow worms.

6. To monitor urban development and ensure that, where possible sites with slow worm populations are left undisturbed. If this is not possible to ensure good relocation schemes for slow worm populations.

5. TARGETS

Short term targets (0 - 5 years)

1.1 Begin comprehensive population distribution survey for the whole borough.

2.1. Identify existing slow worm populations (in sites managed by the Parks and Countryside Service) and incorporate policies and practices for slow worms in site management plans.

4.1. Begin to raise the general public's awareness of slow worms - target particular sections of society e.g. gardeners, allotment holders, children using interpretation, leaflets, website, enjoy events etc.

5.1. Review the use of pesticides and poisons used by the council for grounds maintenance and discontinue to use where appropriate.

6.1. Monitor urban developments in the borough for detrimental effects to slow worm populations.

Medium term targets (5 - 10 years)

1.2. Begin a population monitoring programme, assessing population size and breading success.

2.2. Identify suitable sites (managed by the Parks and Countryside Service) for habitat enhancement and begin a programme of site restoration/enhancement with a view to translocate slow worms to create new populations.

2.2. Identify suitable sites managed by other departments and outside the council suitable for habitat enhancement and liaise with relevant organisations with the possibility of joint management of potential sites.

2.2/6.2 Liaise with allotment associations and gardening groups to encourage them to garden both organically and in a 'wildlife friendly' manner - i.e. discourage the use of pesticides and poisons/encourage the development of winter hibernation areas and suitable summer habitats in allotments and private gardens.

4.2. Continue to raise the profile of slow worms with members of the general public.

6.2. Monitor urban developments in the borough for detrimental effects to slow worm populations.

Long term targets (10 – 50 years)

1.3. Continue with population monitoring programme.

3.3. Identify suitable sites and begin a programme of habitat creation to translocate slow worms in the borough to create new populations.

4.3. Continue to raise public awareness of slow worms.

6.3. Monitor urban developments in the borough for detrimental effects to slow worm populations.

6. RESPONSIBLE BODIES

London Borough of Ealing (various departments)
English Nature
London Wildlife Trust
Greater London Authority
West London Organic and Wildlife Gardening Association
Various Allotment Associations

7. COMPLEMENTARY PLANS

LBE Habitat Action Plans:

Acid Grassland
Allotments
Amenity Grassland
Arable Grassland
Cemeteries and Churchyards
Hedgerows
Neutral and Marshy Grasslands
Railway Lands
Woodlands (inc Scrub)
Private Gardens

SONG THRUSH *Turdus philomelos*

Song thrushes are widespread and common breeding birds in the UK with the numbers supplemented by migrants from the continent in winter. However a long-term population decline has occurred in Britain since the 1930's which steepened in the 1970's (Marchant, Hudson, Carter & Whittington 1990) and has continued. The decrease in numbers has been so marked that it has received widespread public attention. Song thrushes, although partial migrants, are susceptible to cold winters and are slow to recover numbers after setbacks. Climatic factors are thought to be responsible for the long-term decline. The decline since 1982 is steeper than predicted by climate alone and is not yet fully understood. Song Thrushes may be particularly vulnerable to decreases in the abundance of land molluscs (slugs and snails) associated with the use of molluscicides which has become widespread on both farmland and in gardens and allotments.

1. CURRENT STATUS

The pattern of decline in Ealing has mirrored the national picture. Song Thrushes are still found as breeding birds in all suitable major open spaces in Ealing but are often absent from smaller open spaces and gardens where they formerly nested. In winter, song thrushes used to roost in scrub patches at many locations in the Borough with starlings *Sturnus vulgaris*, blackbirds *Turdus merula*, and redwings *Turdus iliacus*, but with the reduction in numbers of these other species such communal roosts now rarely develop.

2. MAIN THREATS

The main threat to song thrushes is probably the widespread use of molluscicides, including slug pellets, used both in agriculture and by gardeners. Although song thrushes are able to utilise a wide range of foods, they are probably seasonally dependent on slug and snail availability at critical times.

3. OBJECTIVES

1. To maintain a breeding and wintering population of song thrushes throughout the Borough.

2. To publicise the plight of the song thrush and the adverse effects of the use of molluscicides in the light of current or future research.

3. To discourage, reduce or stop the use of molluscicides wherever possible, and to encourage organic methods of gardening.

4. TARGETS

1.1 Indentify sites where improvements can be made to habitats to

encourage breeding and wintering populations of song thrushes.

2.1 Work with the Ealing Allotments and Gardens Society and the West London Organic and Wildlife Gardening Association to produce information on the plight of the song thrush and to target that information to gardeners and allotment holders who may be best able to make a difference.

3.1 Work with site managers to reduce the use of molluscicides on council owned land.

5. PARTNERS

Ealing Allotments and Gardens Society, West London Organic and Wildlife Gardening Association, British Trust for Ornithology.

SWALLOW *Hirundo rustica*

Swallows are summer visitors to Europe, relying on a plentiful supply of insects in areas of open countryside usually associated in the breeding season with the presence of grazing animals and water bodies. Suitable buildings or structures are also necessary for nest sites.

1. CURRENT STATUS

Current status and occurrence, although swallows have been pushed outwards from Central London by built development, they still breed in the more open areas of the suburbs (Montier 1977). In Ealing there is a small colony inside the Borough boundary near Osterley and birds breeding just outside the Borough regularly feed at Yeading Valley Park and Islip Manor Fields. Nesting occasionally occurs in both Northolt and Hanwell. Undoubtedly, the absence of grazing animals from most of Ealing's managed hay meadows has an adverse effect on this species. Nest sites may also be limiting, although suitable locations such as bridges are generally present where stables or outbuildings are not.

2. MAIN THREATS

Past loss of open space to built development has been the main factor resulting in swallows now nesting only on the western edges of the Borough. The low number of sites with grazing animals and consequent lack of abundant insect prey available close to suitable outbuildings means that swallows are absent from many open spaces in Ealing which might otherwise be suitable. Swallows almost always occur as commensals with man and when nests are built landowners and local people usually actively seek to protect them.

3. OBJECTIVES

1. To maintain a breeding population of swallows in Ealing, occupying all suitable open areas.

2. To introduce low-intensity natural grazing schemes on suitable meadow sites.

3. To create or maintain ponds on a wide range of sites.

4. To ensure nest sites are available where these may be a limiting factor.

5. To involve landowners and local people in the provision and protection of nest sites.

4. PROPOSED ACTIONS

2.1 Prepare feasibility study for change to low-intensity natural grazing using primitive horses and cattle on Council-owned meadow sites currently cropped by machine.

3.1 Continue to create ponds on appropriate open sites.

4.1 Fit artificial nest platforms to bridges or other structures close to suitable feeding areas where nest sites may be a limiting factor.

5.1 Visit and monitor nest sites during the breeding season and involve landowners and local people in this work.

WATER VOLE *Arvicola terrestris*

Water voles are small mammals living in colonies close to still and moving waterways, especially those with earth or sandy banks. Here they form burrows for both nesting and refuge. Water voles feed mainly on grass, but also eat fruit, roots and bark.

1. CURRENT STATUS

1.1 IMPORTANCE

Once a familiar site, the water vole has suffered one of the most severe declines in numbers to affect any of the British mammals this century. In Ealing watercourses like the River Brent still contain some populations of water vole. This and other sites within Ealing have the potential to sustain increased numbers.

1.2 TRENDS

The decline has been particularly rapid in the past 20 - 30 years. A national survey carried out in1989-90 recorded losses from 67% of former sites and it is estimated that this may have risen to 94% by 2000.

1.3 DISTRIBUTION

Populations have become increasingly fragmented. Water voles are currently known to be present at the following sites; Lower Well Meadow, by the ditch and bank system running parallel to the canalised section of the River Brent, also further upstream within the Brent River Park at Greenford Island.

Many parts of the Grand Union Canal still have water voles, especially at Horsenden Hill and Sudbury Golf Course, and water voles have recently been found at Greenford Lagoons.

2. CURRENT FACTORS AFFECTING THE SPECIES - THREAT ISSUES

1. Lack of suitable bankside habitats for example through re-profiling of the river channel, including channelisation.

2. Predation, especially by mink.

3. Climate changes e.g.. droughts reducing available food.

4. Pollution of water from heavy metals, organochlorides and rodenticides.

5. Fragmentation and isolation of populations.

5. Lack of knowledge on dispersal of juveniles and non-territorial adults.

6. Loss of habitat through drainage and infilling.

3. CURRENT ACTION/ MECHANISM

3.1 PROTECTION

The water vole has no direct protection. However water vole's places of shelter or protection have, since April 1998 received legal protection through inclusion on Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) in respect of section 9(4) only.

This makes it an offence to intentionally: damage, destroy or obstruct access to any structure or place which water voles use for shelter or protection; disturb water voles while they are using such a place.

Licences are available from English Nature to allow activities that would otherwise be offences: for scientific or educational purposes; for the purpose of ringing or marking; for conserving wild animals or introducing them to different areas.

Licences can also be issued by the Ministry of Agriculture, Fisheries and foods for the purpose of: preserving public health; preventing the spread of disease; preventing serious damage to any form of property or to fisheries.

As a protected species the water vole is covered by the requirements of the Department of the Environment, Transport and the Regions' Planning Policy Guidance on Nature Conservation (PPG9). This states that the presence of a protected species should be given material consideration when determining a planning application. It also suggests that planning authorities should consider attaching appropriate planning conditions or entering into planning obligations to secure the protection of the species.

Planning authorities should, therefore take appropriate steps to check for the presence of protected species and ensure that water vole habitats are protected through the planning process.

3.2 MANAGEMENT

The River Brent, Costons Brook, small streams and channels feeding into the Brent River Park are included within management plans, which also cover adjacent wet/dry land areas. (N.B. the flow of the River Brent is set by the EA/BWB at Brent Reservoir).

Much of the land where water voles are or could be established are managed by the LBE Parks and Countryside Service for nature conservation. Some of these sites are maintained and improved with assistance from Countryside Stewardship Schemes and DETER Green Corridors funding.

Recent works have included, digging a pond and creating a ditch and bank system by the lower slopes of Elthorne Waterside. Also at Trumpers Field there have been riverside enhancement works such as creating a pond and fencing the canal boundary in preparation for low intensity grazing project

4. OBJECTIVES

1. To collate existing any existing data on water voles and their habitats within the LBE.

2. To monitor and advise on any planning/land management issues that may impact on water voles and their habitats.

3. Create habitat enhancement of degraded sites. This includes restoration of vegetated bankside corridors, creating links with currently fragmented habitats and water vole populations and the monitoring of such works.

4. To raise awareness of water voles and their habitats within the local community. This could especially be achieved through continuing involvement with the following local groups: Brent River and Canal Society, Hounslow and Ealing Conservation Volunteers, Ealing Wildlife Network, and regional representatives of London Wildlife Trust and the Royal Society for the Protection of Birds.

5. Establish any possible effect that mink may have on water vole populations within Ealing and establish safe refuges if necessary.

5. TARGETS

0 - 5 year targets

1.1. Research and collate any relevant historical/current information on water voles and their habitats in Ealing.

2.1. Identify land adjacent to water where detrimental vegetation control/ maintenance could be changed e.g.. By reduction of chemicals used, increasing the width of waterside fringe habitats and looking at the introduction of low intensity grazing.

3.1. To set back and plant sedge beds, to act as filters, by any new or newly maintained sewage outlets.

3.2. Strike pollarded willow arisings to aid removal of excessive nutrients from the water.

3.3. North of A40 at Brentham - enhance water quality and riverside habitat of land.

3.4. Perivale East Meadow - improve riverside habitat - create pond.

3.5. Dormers Wells Allotments - restore ponds, stream and moat (Also create access. Incidentally this is a feeder stream to the River Brent).

4.1. Research and produce information sheet including guidance on differentiating between water voles and brown rats.

4.2. Initiate, plan and train staff, volunteers, and members of other interested organisations to carry out initial survey of water voles and their habitats.

5.1. If appropriate commission professional research into the impact of mink on water vole populations in Ealing.

5 - 10 year targets

3.6 To reduce habitat fragmentation by linking as many riverside habitats as possible.

3.7. Fitzherbert Walk, Walker Close, St. Margarets Road site de-silt channel and improve habitats.

10 - 50 year targets

3.9. In conjunction with the Environment Agency and Thames Water, continue to improve the water quality of the River Brent and Costons Brook and ensure the flood plain function of the river valley is protected.

6. RESPONSIBLE BODIES

LBE, EA, BWB, EN, MAFF/FRCA, LEU, LWT.

7. COMPLEMENTARY PLANS

The Environment Agency has produced a broad Habitat Statement for Rivers and Streams.

There is a UK action plan for the water vole with the EA as the national lead.

DYERS GREENWEED. *Genista Tinctoria* – Species Statement

A small shrub of the *Leguminosae* family growing from 20 - 50cm. Dyers greenweed is related to gorse although it lacks the spines typical of the genus. Generally growing erect, the leaves are pointed oblong-lanceolate with hairs only at the margins, the yellow flowers grow in short spikes / racemes and are mainly terminal.

1. CURRENT STATUS

1.1. IMPORTANCE

Although named 'dyers greenweed' the dye produced from the flower stems was in fact yellow. The name comes from a process that was devised in the 14th Century by Flemish immigrants. The cloth was first dipped in the 'greenweed' dye and then in a woad dye to produce 'Kendal' green, as it became known, in honour of its Cumbrian town of origin.

1.2. DISTRIBUTION

Nationally rare. Extremely rare in the Greater London area, the only known site in the Ealing area is Horsenden Hill. It prefers rough, lightly grazed grassland with poor soil. Locally abundant on clay and chalk grassland.

2. CURRENT MANAGEMENT

Map areas of dyers greenweed, recording on Recorder 2000 network.
Increase public awareness by including this species on nature / botany walks within the Enjoy Ealing Programme.
Prevention of scrub encroachment. Control of bramble, tree regeneration to encourage spread.
Protection from human encroachment (Public sites) by fencing, and desire line management.

FUNGI – GENERAL

Fungi have different characteristics from flowering plants and this affects the nature of their SAPs. Fungi are often ephemeral, appearing at a site, then disappearing, and maybe reappearing a few years later. This may be due to the fact that it is only the fruiting bodies hat are observed and recorded; the more permanent vegetative parts (mycelia) are hardly ever identified. But fungi are often truly ephemeral, appearing for a while on rotten logs or even dung.

Some fungi are dependent on tree spp, forming a symbiotic association. These are critically dependent on survival of the trees and their habitat. Others are parasitic or saprophytic and may thus depend equally on the presence of other particular (non-fungus) spp.

Fungi also tend to be widespread. For example, a significant proportion of the British fungus flora is found in Japan, unlike the situation for flowering plants. (This is no doubt due to the fact that fungi produce vast numbers of minute highly mobile spores, unlike flowering plants.)

These considerations mean that any SAP which refers only to the sp itself and the sites where it is currently recorded will not be very useful. The only way to conserve and enhance fungi is to preserve and enhance the types of habitat where they occur or are likely to occur.

Quality of habitat is important because the quality of habitat determines the range of spp, including fungi, present. However, it may not be sufficient just to preserve a generalised habitat type. Because some fungi depend on a particular plant or animal, one needs to ensure that the habitat retains the particular sp the fungus needs.

As with all groups, different spp of fungi are found in different habitats. Thus a critical part of BAPs is to ensure that the full range of habitats survives. In fact, many fungi spp are not confined to a particular narrow habitat type, so preservation of every habitat is not necessarily a priority as far as fungi are concerned. However, an important exception is woodland. Woodlands are the most important habitats for fungi and many fungi are highly specific to a particular tree spp (alive or dead). Thus it important to preserve all the different types of woodland and tree spp in them.

Quantity of habitat is also critical because survival of spp depends on sufficient quantities of habitat being available for re-colonisation. For the rarer fungi, preserving the quantity of habitat is especially important, as, almost by definition, they are likely to disappear if their habitat becomes too rare.

Although reference only to the known sites of a sp it not sufficient, this does not mean those sites should be disregarded. A site where a fungus sp occurs is, by definition, a suitable habitat. Our knowledge of the ecology of fungi is limited, so other sites, which might appear to be suitable for that fungus may in fact not be. Also, if a particular site is known or has been known for a

fungus, that sp is more likely increase there or to re-appear there than at other sites, because mycelia are present or because the greatest concentration of spores will be there. As a general rule, therefore, a site, which is currently good for fungi, having a high diversity or having rare spp, should be protected as a priority.

Although there may be a continual change in the microhabitat on which a fungus depends, e.g. rotting wood, constancy of macrohabitat is important. Although fungal spores are very mobile, it is nonetheless the case that the oldest and least disturbed habitats tend to be the richest. Little work has been done on the principles and methods for conservation of fungi, but the general rule would seem to be to avoid undue change and unnecessary disturbance.

As an example, undisturbed woodland has a richer fungus flora than coppice. Thus if coppicing is to be done, only part of the woodland should be coppiced. Furthermore, only a part of that area should be done in any one year so that the fungi can re-colonise and thus have the best chance of survival in the area as a whole.

Another example of drastic change is pond clearance. If possible, this should be tempered by only clearing part of the pond at one time, leaving the rest to be cleared in later years. In this way, a sp dependent on the state of the pond before clearance has the opportunity to survive in the pond as whole and can re-colonise the cleared part when the conditions become suitable. (This principle is not confined to fungal conservation - it is just as important for plants and insects.)

There are at present an estimated 12,500-15,000 spp of fungi in Britain, of which about 2,500-3,500 are "basidiomyctes"- the group which includes the more familiar mushrooms and cap fungi.[1] The state of Britain's fungus flora is, however, not well known. A check-list is being prepared which will list all the spp known to Britain and identify those that are rare or threatened; however it is expected that this checklist will take about 3 years to produce.[2] The checklist should shed light on the significance of LBE's fungi. If fungi have been recorded from LBE which are noted as rare or threatened in the checklist, this would be justification for preparing a Species Action Plan (SAP) or Species Statement (SS) for the fungus sp concerned. EBAP should be updated with a review of fungi when the check-list has been published.

Action: Review and update this statement setting actions and targets when the review of the checklist has been produced.

A number of habitats have been noted of particular importance for fungi : [3]

[1] Alick Henrici – pers comm
[2] Alick Henrici and Peter Roberts, Kew Mycological Institute – pers comm.
[3] Carl Borges, Fungi BAP, English Nature – pers comm.

Chestnut plantations on poor soil
Spp poor grassland on unimproved/low nitrogen grassland – possibly churchyards or old lawns (good for waxcaps)
Old trees – heart rot + dead wood + mycorrhizal
Dead wood generally
Other woodland on nutrient poor soils

LBE has no chestnut plantations and limited areas of nutrient poor grassland and woodland, but those areas that exist should be a priority for investigation.
Action: Investigate the possibility of suitable areas where fungi habitats can be developed.

Note - These basic principles of fungus conservation - namely preservation of quantity and quality of habitat and avoidance of drastic change - have been discussed with Peter Roberts, a mycologist at the British Mycological Institute at Kew, and Alick Henrici, one of the country's leading amateur mycologists.

NATIONALLY RARE FUNGI

1 Introduction

There are a number of fungi that have been recorded from LBE that are nationally rare, or unique to LBE. Detailed, multi-point Action Plans for their conservation are not appropriate for the reasons explained in SS1 and therefore a full SAP (Species Action Plan) is not needed. In order to bring together the information that is available and to highlight the conservation issues in a concise form, the fungi are all dealt with together in this SS (Species Statement).

2 The rare fungi

There are currently 7 spp recorded from LBE that are thought to be nationally rare. In fact, 6 are so rare, or rarely recorded, that they should be regarded as highly endangered. Because they are known only to specialists, none of these fungi have common names. The 7 are:

Antrodia psuedosinuosa
Aniptodera fusiformis
Sporidesmium ontariense
Antrodia psuedosinuosa
Coronicium alboglaucum
Hemimycena epichloe
Orbilia fimicoloides
Rhodocybe gemina

Antrodia psuedosinuosa
This fungus is one of a number of spp of fungi that cover wood with a crust but which form tiers of brackets. As the name suggests, it is closely related to another sp, Antrodia sinuosa, from which it is distinguished by microscopic characters. It was found on a rotting elm log in Perivale Wood, but there is no other information available on its ecology, such as whether it can live on other wood.

Aniptodera fusiformis
This fungus is a small but distinctive ascomycete, which was found on a piece of wood in a pond in Perivale Wood. There is no other information available on its ecology.

Sporidesmium ontariense
This is a hyphenomycete (an imperfect state of an unknown ascomycete), which was also found on a piece of wood in a pond in Perivale Wood. There is no other information available on its ecology.

Coronicium alboglaucum
This is a corticoid (crust-forming) white basidiomycete found on a piece of stacked wood in Perivale Wood. There is no other information available on its ecology.

Hemimycena epichloe
This is a small white fungus with a cap about 5mm across, found fruiting on rotting grass stems in Perivale Wood. It is in a small genus Hemimycena which is related to the familiar and common genus Mycena (bonnet caps). There is no further information available on its ecology.

Orbilia fimicoloides
This is a small fungus, which grows on dung. It was first observed on field mouse or field vole dung in 1996 at Perivale Wood. As the name suggests, it is closely related to another sp, Orbilia fimicola, from which it is distinguished by microscopic characters.

Rhodocybe gemina (R. truncata)
This is a basidiomycete (cap fungus) that occurs in Perivale Wood. It is currently a Red Data Book sp, although it may be removed when the list is next revised.

2 Status and occurrence

Antrodia psuedosinuosa
The fungus is known from a single rotten fallen elm stem in Perivale Wood where it was first identified as new to science. It was described in 1997 (*Mycologist*, Nov 1997, page 152). Already, the log on which it occurs is rotting away and the fungus has all but disappeared. The fungus clearly has a limited lifespan on any elm log and must have 'moved around' in the past. However, it has now been found in a couple of other places in the UK and also in France and Spain.

Aniptodera fusiformis
The record for Perivale Wood is the first for this country where it was found on a piece of wood in the "Upper Woodland Pond" in 1985. It was written up in the *Mycologist* of August 1996. The sp is new to Europe, and the second record in the world, having been previously recorded just once in a creek in Illinois where it was growing on a submerged twig of an American poplar, Populous deltoides.

Sporidesmium ontariense
The record for Perivale Wood is the first for this country where it was also found on a piece of stacked Salix (willow or sallow) wood in the "Upper Woodland Pond" in Perivale Wood in c1985. The sp is new to Europe, and was only formally named in May 1999. The only other place where it is known from is Ontario, Canada.

Coronicium alboglaucum
The record for Perivale Wood is the first for this country. It was found on a piece of stacked Salix (willow or sallow) wood in the "Pondfield" in Perivale

Wood in Mar 1994 and again in 1995 and 1997. It has been recorded in a few places in Europe but as yet no other sites in Britain.

Hemimycena epichloe
The sp was first recorded in the "Paddock" in Perivale Wood in July 1992 and was subsequently found again in July 1994. It has since been found in Kew Gardens, but there are no other records for the UK. It was first recorded in France, where it is regarded as uncommon. It is unknown in Scandinavia, whose fungi are well recorded; this suggests it has a limited distribution.

Orbilia fimicoloides
The fungus was found by culturing the droppings of small mammal from Perivale Wood, probably a fieldmouse or field vole. It is the only known record in the world and was described in 1997 (Mycology Research, no 102, pages 99-102). Dung is a very temporary habitat. The fungus clearly has a short lifespan in any one place and must have 'moved around' in the past.

Rhodocybe gemina
This has been found under elders and hawthorns near the "Canal Path" in Perivale Wood. Unlike the other spp in this SS, it is known from a fair number of sites in the UK.

The true status
The fact that these spp (with the exception of Rhodocybe gemina) have only been recorded from one or two places in the UK does not mean that they do not occur elsewhere in the UK. Because these fungi are hard to identify and because there is so little fieldwork on mycology done, it is not possible to say what their true status is. However, the fact that that they had not been recorded until recently means they are almost certainly rare or very rare (again with the exception of Rhodocybe gemina). The Precautionary Principle would suggest that all these spp should be regarded as rare and endangered until there is evidence to the contrary. Thus their conservation should have a high priority.

3 Current factors affecting the species

The only known site in LBE where these 7 spp occur, Perivale Wood, is a Local Nature Reserve and SSSI. Currently this site is secure, being owned and run for nature conservation by the Selborne Society. However, English Nature (EN) is trying to remove its SSSI status, which will reduce its level of statutory protection. Removal of SSSI status could also, by reducing its status, make it harder to obtain external funding needed to maximize the potential of the reserve and its fungi. EN's stance is thus a threat, albeit indirect.

4 Policies needed to preserve rare fungi

Antrodia psuedosinuosa
Nothing can be done to preserve the one location in LBE where it is currently known. The most important action is to ensure that dead elm trees are allowed to fall and rot naturally wherever possible. In this way, the fungus will have the maximum opportunity to re-establish. Preservation of Perivale Wood and in particular its elm woodland is of the highest priority. Preservation and indeed expansion of elm woodland in the rest of the borough is also important since the total amount of elm woodland determines the amount of dead elm logs. The more elm logs there are, the greater the chance of the fungus surviving.

Action: Where ever possible leave fallen dead elm trees to rot in situ.
Action: Explore the possibility of expanding the area of elm woodland or managing existing areas to allow a continual supply of dead elm.

Aniptodera fusiformis and Sporidesmium ontariense.
Given the ephemeral habitat - a piece of wood in a pond - there is nothing that can be done to preserve it in that precise location. The most important need is to protect the site where it occurs and the generalised habitat type. Within Perivale Wood and at other sites in the borough, the value of rotting wood needs to be recognised and fallen wood should, wherever possible, be allowed to lie and rot undisturbed.
Action: Whenever possible allow dead wood to rot where it has fallen.

Coronicium alboglaucum
Given the ephemeral habitat, rotting wood, there is noting that can be done to preserve the precise site. The most important need is to protect the site where it occurs and the generalised habitat type. Where possible, fallen or cut wood should be allowed to rot away without disturbance.

Hemimycena epichloe
Given the ephemeral habitat, rotting grass stems, there is noting that can be done to preserve the precise site. The most important need is to protect the site where it occurs and the generalised habitat type, ie unmown grassland.

Orbilia fimicoloides
As the microhabitat - dung - is ephemeral, there is no direct action, which will preserve individual locations. The best way of conserving the sp would appear to be to preserve the populations of field mice and voles, this ensuring a continuing supply of dung. These mammals are not considered ‘key’ spp, i.e. rare or under threat and therefore do not have a SAP. However, any reduction in these mammal populations, while it might not be a significant threat to their own survival, could be a threat to this fungus spp, which is probably rare. This highlights the fact that preserving the populations of the more common spp, not just the rarities, is important for the overall preservation of bio diversity. The best way to preserve populations of field mice and voles is to preserve and enhance the quantity and quality of their habitat, namely rough pasture and other habitats.

General principles

One general principle that emerges is that one needs to preserve the range and extent of habitats in order to preserve the fungal spp. It is also very apparent that minimal disturbance of those habitats is usually best.

All these rare spp have been found in Perivale Wood and these spp are a prior more likely to re-appear there than anywhere else. Futhermore, Perivale Wood is one of the richest recorded anywhere (given its size and range of habitats). It should therefore be given the strongest possible protection, statutory and otherwise.

The fact that these fungi have been found and identified is a testament to the knowledge and energy of Alick Henrici. He is one of the country's leading amateur mycologists whom, by chance, is active in LBE. All the information on the spp and their distribution has been supplied by him. This highlights the fact that effort needs to be made to bring in experts on a regular basis to supplement the work of others on recording and monitoring, especially for the more 'difficult' groups.

Action: Explore ways of creating an effective monitoring system.

WILD SERVICE TREE. *Sorbus torminalis*. Species Statement

The wild service tree is one of the least known native trees of the mountain ash family. It often grows quite inconspicuously although it has been recorded to grow in pockets up to an acre in size. It looks similar to a maple in that its leaves are ovate and lobed like a maple but alternately borne with forward lobes all finely but usually doubly serrate. It often has a cracked and flaky, pale gray and dark brown / red tinged bark. It can grow to 22 meters tall and flowers in May with white hawthorn like blossoms in loosely pubescent heads 10-12 cm across. These develop around October into rich, dark brown berries about 1cm in size. It usually spreads by suckers, and seedlings have rarely been found.
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1. CURRENT STATUS

Once common tree in the U.K. that has been used be man for many things including musical instruments. They are much less common today as their natural habitat of ancient woodland has been destroyed or converted to other uses. Their fruits were a staple diet during Neolithic times, and were still sold in markets during the 1850s. They were often strung up in long necklaces and picked singly by children as when they become ripe as they are quite sweet with a taste like no other fruit. Uncommon in greater London and only known to be naturally occurring on two sites in Ealing, Horsenden Hill and Grove Farm. There have been recent plantings of standards in Acton Park.

It is largely confined to ancient woods and hedgerows on clays in eastern and southern England but also on limestone in the west and as far north as the Lake District.

2. CURRENT MANAGEMENT

Map individual specimens, and note in Recorder 2000.
Increase public awareness by including in guided walks on woodland management.
Thin out other competing trees and shrubs so that naturally regenerating saplings have a good chance of survival.

Protect from human and animal mutilations by fencing off areas around them if required.
Possibly propagation of new trees should take place but only if they are planted on currently occupied sites.

8.0 PEOPLE AND PARTNERSHIPS

Production of the biodiversity plan is just the beginning. The future success of the Ealing Biodiversity Action Plan depends on partnerships being forged between the organisations identified in the Action Plan, as well as other relevant organisations at both local and national level. This needs to be supported by the people of the Borough, to this ensure that this happens everyone involved in the biodiversity process needs to play their part.

8.1 To facilitate this the Ealing Wildlife Network / LA21 Biodiversity Group will act as an advisory group for the Ealing BAP. This will include:

1. Supporting initiatives to achieve targets. This will be achieved by working with the local groups and council officers to identify and create opportunities to achieve the targets identified in the Action Plan.

2. Monitoring progress. There will be updates on progress towards achieving the BAP every 2 years. These will also identify where targets are not being achieved and action required to enable this to be put right.

3. Reviewing and developing the action plans. It is intended that the plan is reviewed every 5 years. However, the action plans are working documents, which may need amending and developing as actions are achieved.

4. This group will be used to help devise solutions to overcome obstacles, which are preventing achievement of the proposed actions.

5. The group will be asked to identify organisations, which will deliver the set targets. If this is not possible the group and council officers will need to look for alternative ways to achieve the actions.

8.2 The Parks and Countryside Service, with the support of the advisory group will produce progress report every 2 years which will be presented to the Council's Open Spaces Advisory Committee.

8.3 It is also important to involve the wider community and this will be achieved in a number of ways.

- Educational walks through the Enjoy the Great Outdoors walks programme, targeting issues identified in the Action Plans.

- Through the Schools education programme.

- Through the production of displays which will be used to promote nature conservation in the borough and raise public awareness about the need for managing the natural environment.

- Develop and promote activities and initiatives linked to the BAP action plans such as the “Brent River Park gets Battitude” project.

- Develop a range of opportunities for individuals to get involved in monitoring and management activities.

- Engage local businesses by offering sponsorship opportunities to get involved in supporting BAP targets.

- Encouraging local businesses to link their own environmental policies with those targets identified in the BAP.

9.0 INTEGRATION WITH OTHER POLICIES

This plan has been produced to ensure that the people of the Borough have the opportunity to play their part in conserving the wildlife of the Borough. The action plans aim to ensure that the key habitats and a range of species of the borough have been identified and are protected. However, many factors effect the borough's wildlife and the bio diversity action plan can not stand in isolation, other factors need to be recognised.

9.1 The Mayor for the Greater London Authority has been charged with producing 7 specific strategies in addition to a bio diversity strategy. These strategies will be linked to each other with bio diversity being recognised and included in each of them.

9.2 The Greater London Authority Strategies are:

1. Air quality
2. Ambient noise
3. Culture
4. Economic development
5. Municipal waste management
6. Spatial development
7. Transport

9.3 This joined up approach needs to be mirrored in Ealing and the Bio diversity Action Plan should be recognised and considered when the Borough produces new strategies or revises old ones. Many of these strategies need to be developed on a regional basis and once these London wide strategies have been produced there will be action required at a local level to ensure that Ealing plays it's part in the process.

9.4 Central to Ealing policy documents is the Unitary Development Plan, which has an extensive section on open spaces, chapter 6. It is important that this chapter complements and re enforces the targets and aspirations of the BAP. Also that the targets in the BAP are recognised and considered when planning applications are being considered.

9.5 A Parks Strategy for Ealing is being produced, the BAP has been used to develop the nature conservation section of this document.

9.6 The Parks and Countryside Service is in the process of going through a Best Value review which shares many of the targets listed in the BAP. The BAP is also recognised in the Parks and Countryside objectives 4,5 & 6.

9.6.1 Objective 4:
To enhance the positive environmental impact of the parks and countryside service including the improvement of the nature conservation value of parks in line with the principles of sustainability.

9.6.2 Objective 5:
To implement the short, medium and long term targets of the Ealing Biodiversity Action Plan by developing site management plans with an emphasis on community involvement and seeking further protection of nature conservation areas by designating further local Nature Reserves (LNRs).

9.6.3 Objective 6:
To carry out on site, local resident, Ward Councillor and Area Committee consultation with local residents on all new nature conservation initiatives and projects to increase awareness, understanding and participation.

9.7 A fuller description of the Greater London Authority 7 strategies has been produced by Nic Ferriday and the Selborne Society with actions that could be considered in these areas (see appendix 2). Although this is outside the scope of the Biodiversity Action Plan it has been included for reference.

9.8 The following actions are required to ensure that bio diversity is considered when other strategies are produced. No time scale has been produced for these actions because many are linked to work being carried out by others and need to link with their time scale.

9.9 Actions

1. Ensure that the Unitary Development Plan incorporates the aspirations and targets in the BAP.

2. Ensure that any Borough strategies produced take account of the BAP and involve the EWN / LA21 Bio diversity group. Many of the issues that need to be addressed through this process are discussed in Appendix 2.