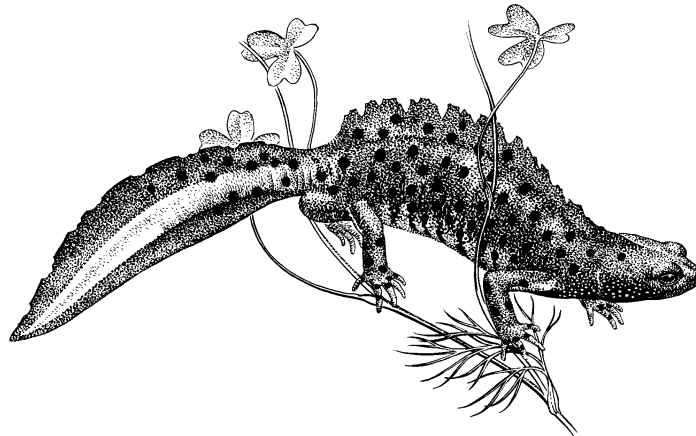


Wildlife Links & Corridors

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This guidance note is aimed at developers of sites within or adjacent to an identified wildlife link or corridor and includes advice on:

- Design, Landscaping and Siting
- Mitigation
- Measures to Prevent Damage During the Construction Process
- Management
- Useful Contacts and Addresses
- Appendices
 - Habitat Creation, Restoration and Management Techniques (Appendix 1)
 - Policy EN6/4 of the Bury Unitary Development Plan (Appendix 2)

1 - INTRODUCTION

- 1.1 This Development Control Policy Guidance Note expands upon the Council's planning policy in respect of wildlife links and corridors as set out in Policy EN6/4 of the Bury UDP – see Appendix 2 for details of Policy EN6/4. Wildlife links and corridors are defined as the major routes for migration, dispersal and genetic exchange of wild species. Maintaining and enhancing a network of wildlife links and corridors increases the chance of species surviving compared to those in an isolated population.

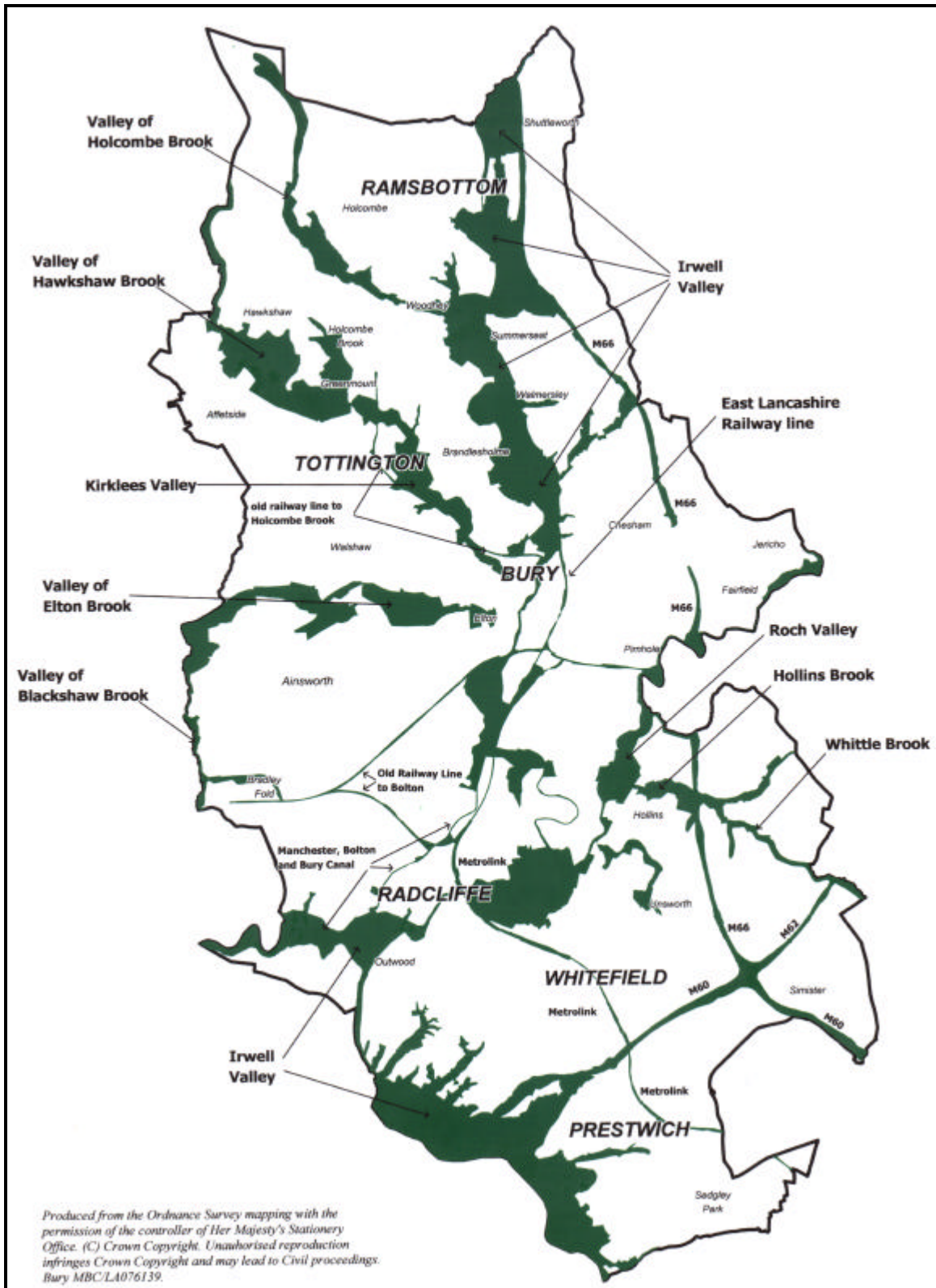
Background

- 1.2 In Bury, wildlife corridors are generally based wholly or substantially on the network of river and stream valleys. Wildlife links, on the other hand, are generally narrower than corridors but perform an equally important function and mainly consist of narrower/more defined features such as railway embankments, motorway verges and canals.
- 1.3 The defined network of wildlife links and corridors in Bury is based on the recommendations of the Lancashire Wildlife Trust (LWT) following their Phase 1 (1990/91) and Phase 2 (1991/92) Habitat Surveys of the Borough.
- 1.4 The Phase 2 Habitat Survey identified the Borough's network of wildlife links and corridors on a diagrammatic basis. This work formed the basis of the network later identified in the Bury UDP under Policy EN6/4
- 1.5 The Phase 1 and Phase 2 Habitat Surveys remain the source of the most comprehensive information on wildlife habitats, outside Sites of Biological Importance, in the Borough. However a new Habitat Survey is to be carried out in 2001.

2 - ADVICE

- 2.1 The advice contained in this note is particularly aimed at developers who may be seeking to develop land in or adjacent to an identified wildlife link or corridor.
- 2.2 The Council recognises the importance of wildlife links and corridors as routes for species migration, dispersal and genetic exchange. Species found in wildlife corridors can include European Protected Species (Habitat Regulations 1994), UK Protected Species (Wildlife and Countryside Act 1981 as amended), Biodiversity Species and other more common species. For this reason it is important to consolidate and, where appropriate, strengthen the effectiveness of these routes, and to resist development which would adversely affect them. It is also considered important to increase the awareness of the potential impacts that certain activities can have on a wildlife link or corridor.
- 2.3 However, it is also recognised that the sheer diversity of wildlife habitats makes it difficult to provide specific advice relating to methods of strengthening links and corridors and ways of contributing to their effectiveness. Nevertheless, there are general principles which can be applied and these are reflected in this guidance note.

Map 1 – Wildlife Links & Corridors



Wildlife Links and Corridors

- 2.4 Developers should note that the diversity of habitat necessitates the individual assessment of any proposal both in terms of its likely impact on the link or corridor and the proposed methods of landscaping and management. For example, where a part of a link or corridor is known to be of value for a particular species, contributions to the effectiveness of the link or corridor should be tailored to meet the specific requirements of that species although not to the detriment of minority species.

Guiding Principles

- **Design to avoid harm to the link or corridor.**
- **Mitigation for the reduced integrity of the corridor.**
- **Compensation measures where a proposal would harm a link or corridor.**
- **Take appropriate measures if Protected Species are present on the site.**

- 2.5 The Council will not permit development that would adversely affect identified corridors and links. In consultation with the Greater Manchester Ecology Unit (GMEU) and other relevant conservation organisations, the Council will consider each planning application on its individual merits in terms of the likely impact on the link or corridor. Where the wildlife corridor is reasonably wide, development may be acceptable, but it would be expected to retain, enhance or create additional habitats at the same time. Conversely, where the corridor is narrow, it will not be easy to carry out a development without damaging the effectiveness of the route. **In general terms, any proposal which would restrict the effectiveness of the route for species movement will not be permitted,** particularly where this would sever or impair the operation of the route.
- 2.6 However, development affecting a link or corridor may be permitted where:
- *the reasons or need for a development having adverse effects may be considered to outweigh the harm to the nature conservation value of the site; and*
 - *amelioration measures can be put in place which would make the proposal acceptable.*
- 2.7 Where a development is proposed in a link or corridor, the first consideration is what steps can be taken to **avoid harm** (i.e. through careful siting) as far as possible. If some harm is to result then the next step is to determine appropriate mitigation measures. The term **mitigation** is used to describe measures which seek to reduce or minimise the adverse effects of a development. In some exceptional instances where it is not possible to avoid harm or to mitigate for adverse effects, but the development is considered acceptable (perhaps because of other material considerations) then it will be necessary to **compensate** for harmful effects.
- 2.8 For development proposals in wildlife links and corridors, the developer should seek expert ecological advice – see section 5. If development proposals are likely to have significant environmental impacts (e.g. where there is a lot of cut and fill, or changes to drainage patterns) it may be necessary to commission investigations to establish the extent of the impact.

- **Design to Avoid Harm**

2.9 Any new development proposals within or adjacent to an identified wildlife link or corridor will be assessed with regard to their potential impact on the function and effectiveness of the link or corridor. The nature of a development can determine the level of disturbance to wildlife and this will be a consideration in determining a proposal within or adjacent to a wildlife link or corridor. Different species have different levels of tolerance to disturbance. Where a development proposal is considered acceptable because it would not sever or impair the operation of a link or corridor, it should include measures to avoid harm, for example, by careful siting and design.

2.10 Designs and layouts should attempt to avoid harm to key habitats such as ponds, mature trees and hedgerows; important species such as those protected through legislation or recognised under biodiversity action plans; buffer areas for both habitats and species; and other landscape features of major importance for wildlife. Harm would include:

- *direct impact through the actual destruction of the habitat;*
- *indirect impact through disturbance during and after the development;*
- *isolation of retained features.*

2.11 Any proposals for the avoidance of harm to ecological features should be submitted as an integral part of either the full or reserved matters planning application and agreed as acceptable prior to permission being granted. The proposals should include measures to ensure accidental damage does not occur during the construction phase of the development and demonstrate that the features will not be harmed by the completed development directly, indirectly or through isolation.

- **Mitigation**

2.12 Where a development proposal is considered acceptable in principle, and will avoid harm to any features of important ecological value within the corridor mitigation will still be required for the reduced integrity of the corridor. This should include both enhancement of the retained undeveloped wildlife corridor or link and the use of wildlife friendly features within both the soft and hard landscaping of the development. Mitigation could include:

- *the use of locally native tree and shrub species within the soft landscaping of the development;*
- *removal of culverts, channelised watercourses and replacement with open watercourses designed to encourage wildlife;*
- *removal of alien species from the wildlife corridor such as Japanese knotweed and giant hogweed;*
- *introduction of a management plan for the enhancement of the retained ecological feature.*

2.13 Mitigation proposals should form an integral part of the planning application. As well as work being undertaken within the application boundary it may be necessary for mitigation work to be undertaken on land owned by the developer, but outside of the application site. The proposals should include both site works, timing and future maintenance.

• Compensation

2.14 Where it is not possible to avoid harm to features of ecological value from a development proposal, or to incorporate mitigation measures to minimise the impact on the link or corridor, then it will be necessary to compensate. Compensation is the exception rather than the norm, and would be likely to apply where a proposal would harm a link or corridor, but due to other material considerations the Council may consider the proposal to be acceptable. Compensation could include:

- *Re-creation as nearby as possible of features and landforms to support the same quantity and quality of habitats and species as would be otherwise lost or displaced through the development;*
- *Where the loss of the integrity or severing of the existing corridor or link is the main adverse impact measures to create an alternative route to maintain a continuous corridor;*
- *Translocation of habitats and species that would otherwise be lost;*
- *Restoration and enhancement of surrounding/nearby features unaffected by the development;*
- *Creation of new habitats and buffer areas in-keeping with the locality.*

It should be noted that compensation is a last resort, and in many instances compensation measures do not truly offset harmful effects of a development .

2.15 Developers will be expected to provide details of compensation measures for development that would have an adverse impact on a wildlife link or corridor as part of the planning application and agreed as acceptable prior to the development commencing. Compensation measures will commonly be most appropriately dealt with through planning obligations under section 106 of the Town and Country Planning Act 1990.

• Protected Species

2.16 As well as considering the type of habitat on a development site, it is also important to establish whether there are any Protected Species using or present on the site. Where a species is protected by the Badgers Act 1992, or by schedules 1, 5, or 8 of the Wildlife and Countryside Act 1981, then the need to safeguard the species and/or its habitat from harm will be greater than normal. Where the species concerned is a European species (protected by the Habitat Regulations 1994), the level of protection will be greater still.

2.17 Where a Protected Species exists on a site, it may be necessary to obtain a licence from the Department for Transport, Environment and the Regions (DETR) (see contacts) before carrying out development or other operations. The DETR has to make an assessment of the proposal and the impact on the Protected Species in

deciding whether to grant a licence. A licence is not necessarily forthcoming, even where planning permission for development has already been granted. Developers are advised to employ a professional ecologist at an early stage when drawing up their development proposals. Planning permission is unlikely to be granted unless the licence has been obtained first, or clearly will be obtained from the DETR for the development.

- 2.18 In designing development proposals on sites where Protected Species are present it will be necessary to tailor the design to include specific features to take account of the protected species.

Measures to Prevent Damage During the Construction Process

- **Ensure careful wildlife sensitive site preparation.**
- **Raise awareness of construction workers.**
- **Protect sensitive areas.**
- **Programme works to a wildlife sensitive timetable.**
- **Establish a management programme.**

- 2.19 Careless construction can result in the loss of wildlife features and this should be prevented by careful site preparation, raising the awareness of the construction team and by supervised construction. It may be appropriate to appoint an "ecological clerk of works".

- 2.20 During construction, it will be necessary to prevent damage to areas of wildlife value. Careless use of construction machinery and materials can cause serious damage to areas of habitat. As such, developers will be required to:

- *provide and maintain protective fencing to create a buffer around areas of particular wildlife value prior to work commencing on site. It is important to ensure that the link or corridor remains unaffected during construction and is not subject to silt runoff or the dumping of rubble or other debris from site clearance;*
- *take care to avoid the spillage of pollutants from construction machinery and that storage of potential pollutants is located away from sensitive areas. Toxic substances such as tar, oil or petrol can not only damage surface flora and fauna but can also be absorbed into the ground to damage tree and plant roots and subterranean species. Eventually, such pollutants can drain into nearby streams or rivers and cause severe damage to aquatic life. Any pollution event traced back to a particular development site will be prosecuted by the Environment Agency;*
- *guidance for riverine works is available from the Environment Agency Protection team. Under the terms of the Salmon and Freshwater Fisheries Act 1975, it is an offence to disturb spawning fish or their habitat. The Environment Agency can provide advice on avoiding disturbance;*
- *ensure that development is undertaken at times of the year which will minimise disruption to wildlife e.g. outside the breeding season. The timing of any works should be stated as part of the planning application (and licence application in the case of protected species) and should be agreed by the Council (and the DETR);*

- *undertake remedial works and aftercare to lessen the impact of construction on wildlife;*
- *ensure that landscaping works and subsequent management are in accordance with the principles of nature conservation and where the development is in an area of specific wildlife value, the landscaping and aftercare should take this into account.*

Management

- **Establish a programme of positive nature conservation management.**
- **Ensure continued appropriate maintenance of landscaped areas.**

- 2.21 It is important that any ecological features within a development scheme are properly managed, since inappropriate or no management are two of the most significant threats to the wildlife resource in Bury. The main consequence of no management is the replacement of one habitat type by a less valuable one.
- 2.22 Unsympathetic management, for example badly timed grass cutting, can eradicate wildflowers. Another problem associated with lack of management is the threat from competitive species. The invasive capability of species such as sycamore, Japanese knotweed or Himalayan balsam may suppress the regeneration of less competitive plants.
- 2.23 The 1981 Wildlife and Countryside Act made it illegal to spread Japanese Knotweed, and Giant Hogweed. Any excavated soil from areas where Japanese Knotweed has established must be disposed of at a licensed landfill site and not reused for further construction or landscaping. For further information on the control of invasive species along riparian corridors contact the Environment Agency.
- 2.24 The threat of invasive species needs to be addressed by establishing a programme of positive nature conservation management so that the most important habitats are managed directly for their wildlife value. In cases where a development proposal within or adjacent to a wildlife link or corridor is considered to be acceptable on the basis of its landscaping, siting and design, the Council will seek to ensure that any landscaping works are the subject of a long term management programme in order to prevent the problems stated above. The management programme should be tailored to the particular species for which the site is important.
- 2.25 Examples of how a developer may demonstrate that provision has been made for the continued maintenance of landscaped areas include:
- *By the developer undertaking the maintenance (in such cases, a landscape management plan may be required to accompany the planning application);*
 - *By the developer offering the site to an appropriate organisation e.g. The Wildlife Trust or the Woodland Trust;*
 - *By the developer arranging for the future maintenance of the site by the Local Authority.*

- 2.26 In cases where it is intended to arrange for the site to be maintained by the Local Authority, it is recommended that an early approach is made to the Council's Department of Competitive Services in order to discuss the proposals. It should be noted that where dedication of land is proposed, a commuted maintenance sum is usually required for a 20 year period.
- 2.27 Similarly, if a site is offered to The Wildlife Trust they will also require a 20 year commuted sum for maintenance

3 - CONCLUSION

- 3.1 This Development Control Policy Guidance Note provides expanded interpretation of Policy EN6/4 of the Bury Unitary Development Plan. This Policy does not necessarily preclude development but seeks to maintain the effectiveness of wildlife links and corridors as routes for species migration and dispersal. The effectiveness of a route can be maintained through mitigation and/or enhancement works in association with a development.
- 3.2 The Council, and others, are able to offer a range of advice and with the co-operation of developers will seek to ensure the best solutions for all parties.

4 - BACKGROUND DOCUMENTS

- The Bury Unitary Development Plan (August 1997);
- Bury M.B.C Wildlife Strategy;
- Planning Policy Guidance Note 9 – “Nature Conservation” (October 1994);
- The Wildlife and Countryside Act 1981;
- The Conservation (Natural Habitats, &c.) Regulations 1994.

5 - CONTACTS

There are a number of organisations involved in wildlife matters in the Borough and each possesses a wealth of information relevant to this subject.

For general information on wildlife links and corridors, and ecological consultants contact:

David Dutton, Wildlife and Project Officer
Bury Metropolitan Borough Council
Department of Development and Environmental Services
Craig House
Bank Street
Bury, BL9 0DN
Tel: 0161 796 6404
Email: d.p.dutton@bury.gov.uk

For information on Policy EN6/4 of the UDP contact:

Amanda Heath, Senior Planning Officer (Planning Policy)
Bury Metropolitan Borough Council
Department of Development and Environmental Services
Craig House
Bank Street
Bury, BL9 0DN
Tel: 0161 253 5281
Email: a.j.heath@bury.gov.uk

For information on the adoption and maintenance of areas by the Local Authority, contact:

Graham Schoon, Countryside Officer
Bury Metropolitan Borough Council
Department of Competitive Services
Craig House, Bank Street
Bury, BL9 0DN
Tel: 0161 253 5909
Email: g.schoon@bury.gov.uk

Other useful sources of information include:

Greater Manchester Ecology Unit

Council Offices
Wellington Road
Ashton-under-Lyne
Tameside
OL6 6DL
Tel: 0161 342 2928

English Nature

Pier House
Wallgate
Wigan
WN3 4AL
Tel: 01942 820342

Environment Agency

Appleton House
430 Birchwood Boulevard
Birchwood
Warrington
WA3 7WD
Tel: 01925 840000

Red Rose Forest

Community Forest Centre
Dock Office
Trafford Road
Salford Quays
Salford
M5 2XB
Tel: 0161 872 1660

The Landscape Institute

6-8 Barnard Mews
London
SW11 1QU
Tel: 0207 350 5200

**Forestry Commission
North West England
Conservancy**

Area Office
Linmere
Delamere
Cheshire
CW8 2JD
Tel: 01606 889912

Lancashire Badger Group

C/o Mr. N. McKeown
PO Box 58
Lancaster
LA1 5AF

**The Wildlife Trust for
Lancashire, Manchester and
N. Merseyside**

Greater Manchester Office
125 Blackburn Road
Bolton
BL1 8HF
Tel: 01204 361847

South Lancashire Bat Group

C/o Angela Graham
15 Lakeland Crescent
Bury
BL9 9SF
Tel: 0161 797 4745

The Woodland Trust

Autumn Park
Grantham
Lincolnshire
NG31 6LL
Tel: 01476 581111

**Department of the
Environment,
Transport and the Regions**

Eland House
Bressenden Place
London
SW1E 5DU
Tel: 020 7944 3000

APPENDIX 1 – HABITAT CREATION, RESTORATION AND MANAGEMENT TECHNIQUES

This appendix provides general information relating to the creation, restoration and management of wildlife habitats in instances where the Council consider that the impact of a development within or adjacent to an identified wildlife link or corridor can be overcome by mitigating or compensation works and a continued programme of management. However, when drawing up specific details on these issues it is recommended that developers obtain expert ecological advice at an early stage.

The measures outlined may equally apply in cases where a developer or other interested party may be wishing to enhance or strengthen a particular wildlife corridor.

In particular, this appendix concentrates on the creation, restoration and management of woodland and trees, water features, grassland and hedgerows.

Woodland & Trees

Woodland and trees are a valuable asset and have many benefits including visual amenity, ability to reduce pollution, wildlife, recreation and education. In terms of wildlife, they provide valuable shelter and food for a wide variety of fauna. Areas of woodland and trees are also host to a wide range of ground flora.

At one time most of the Borough was wooded but a gradual depletion in woodland has seen a reduction in coverage to approximately 2.5%. However, the Borough is part of the Red Rose Forest initiative which is aiming to increase woodland cover throughout the western areas of the Greater Manchester conurbation. There may be opportunities for grant aid for woodland planting and management.

Creation

Tree planting should not be considered on areas which already have some value for wildlife e.g. marsh and semi-improved grassland.

Creating a woodland setting is more complex than merely planting a few trees and shrubs. A woodland environment also contains a wide range of ground flora which can only grow in a shaded setting. For this reason, it is necessary to plant the ground flora at a later date when the tree cover is sufficient to create shade and allow ground flora to properly establish itself.

When creating a woodland setting, it is recommended that young trees and shrubs covering a mix of species appropriate to the specific site conditions (e.g. landform, soil and micro-climate) are used as young trees tend to establish themselves better than older ones. Planting should occur between November and March avoiding periods of heavy frost. On larger plantings a band of tall tree species flanked with

shrubs provides a woodland edge type habitat. Within Wildlife Links and Corridors native species of local provenance should be planted.

It is good practice to use mulch mats when creating a woodland feature. Mulch mats retain moisture and restrict the growth of weeds which can compete with the young trees for food and water and as a result can hamper their growth.

Tree guards should also be used if animal damage is considered to be a potential problem. Tree guards such as PVC spirals or polypropylene tubes prevent damage by small animals such as rabbits and can help with plant establishment and maintenance. The removal of tree guards should be programmed into the management plan.

The maintenance of any woodland planting scheme is vital to successful establishment. Woodland areas should not just be created and then left – they require after care in the first few years to ensure they are well established.

Valuable information on this matter is contained in "Forestry Commission Publication Bulletin 112 – Creating New Native Woodland".

Restoration and Management

It may be tempting to clear any old, neglected or dead trees. However, despite their condition, such trees can be invaluable features of wildlife habitat as dead wood provides a habitat for many insects and this in turn provides a food source for birds and other animals. Diseased trees, on the other hand, can create a threat to commercial woodland and to the safety of the public. Where there is a risk of the disease spreading to adjoining areas of commercial woodland or where the condition of the tree may pose a threat to the safety of the public, the diseased tree should be cleared. However, not all trees with fungal infections are diseased and expert advice should be sought on this issue. Mature trees, particularly those with rot holes may be used by bats.

Before felling any trees, specialists should be asked to check them for bats, and birds (including owls). It is important to note that tree felling may require permission from either the Forestry Commission (felling licence) when a significant number of trees are to be felled, or the Local Authority (for areas covered by Tree Preservation Orders). Always check before commencing such work.

It is important to ensure that woodland is managed to an appropriate programme and advice on this issue can be obtained from Bury MBC, the Forestry Commission, Red Rose Forest, or other appropriate contacts listed in this note.

Thinning and cutting back less suitable, non-native species of saplings can allow the more desirable native species to prosper and dominate. It may be suitable to clear an area of non-native species to create a more open setting within the woodland and allow more light through to the woodland floor. This may encourage a more diverse range of ground flora which will in turn attract a greater diversity of fauna.

Additional measures can be employed to enhance existing woodland. For example, the introduction of common local provenance woodland ground flora, and underplanting with locally native tree and shrub species. Bird and bat boxes can create additional breeding habitats.

Water Features

There are a wide variety of moving and stationary water habitats throughout the Borough. The northern section of the River Irwell, which is now clean enough to support fish, also provides a habitat for grey wagtail, dipper and kingfisher. The Manchester, Bolton and Bury Canal provides a good habitat for moorhen and coot as well as being the most important site in the Borough for aquatic plants. Large reservoirs such as Elton Reservoir provide particularly important habitats for populations of wildfowl and waders. Smaller ponds may be valuable for insects and amphibians, including the internationally protected Great Crested Newt . Even ponds which appear shallow or dry out in some years can be valuable for wildlife.

PONDS

Creation

At the outset it is important to note that permission may be required from the Environment Agency to create a new pond depending on its size, location (in relation to the flood plain) and its source of water. The Environment Agency should be consulted concerning any pond creation or enhancement.

There are several general principles and guidelines which should be followed when creating a water feature for wildlife. Firstly it may be necessary to dig small trial pits to locate and assess the viability of pond creation.

Assuming a water feature has established a suitable supply, water levels can then be maintained in one of two main ways. Firstly, by excavating the water feature to a depth which is below that of the water table or, secondly, where this cannot be achieved, by lining the water feature with a non-porous material such as clay, or bentonite. It is recommended that the water feature be excavated to a minimum depth of 0.45 metres so as to prevent complete freezing during the winter months and to prevent overheating and deoxygenation during the summer.

Creating several smaller ponds may be preferable to one large pond to deter people from introducing fish. It is also advisable to provide irregular edges and varying depths to any ponds created to produce a variety of micro-habitats for wildlife to utilise. Generally, it is also advisable to locate any new water features in the open and away from shade, although some degree of shade can help to provide cover.

The water feature should be stocked with suitable native plants and in most cases should not be stocked with fish which can disrupt the ecological cycles of other species important to the water feature. Fauna should be allowed to colonise the water naturally.

Under Section 30 of the Salmon and Freshwater Fisheries Act 1975, it is an offence to introduce any fish or spawn of fish into any inland water in England or Wales without the prior written consent of the Environment Agency. If fish are to be stocked in any waterbody, they should be native (it is an offence to release or keep non-native fish species without a licence) and have been health checked to ensure they are free from disease.

Restoration and Management

As a general rule, water features are best left alone unless they are full of rubbish or are a health hazard. Creation of new ponds is usually preferable to restoration, allowing natural succession to proceed in the existing pond.

If restoration is the only option, it can be a disruptive process and, as such, it is important to perform this process during the autumn and winter months when wildlife species are not in their breeding season. It should be noted that a licence will be required from the Department of the Environment, Transport and the Regions if a protected species, such as the Great Crested Newt, is present. Current advice on silt clearance includes:

- *Finding out how much silt has accumulated in the pond;*
- *Using appropriate dredging techniques, particularly from the bank side;*
- *Clearing no more than a third of vegetation/silt in any one year;*
- *Place dredgings on bank edges to allow time for aquatic invertebrates trapped in extracted vegetation to drain back into the pond;*
- *Disposing of dredgings responsibly (this may also require a licence);*
- *Giving a pond a chance to recover between major management events.*

RIVERS AND STREAMS

The Environment Agency is responsible for permitting any proposals to upgrade or manage a water course in order to increase its value for wildlife. As such, they must be consulted prior to the commencement of any works.

In general favourable works will include the enhancement of river and wetland ecosystems and initiatives which result in the conservation and enhancement of degraded river channels, removal of canalised or culverted sections of watercourse or the use of large undeveloped buffer strips. Any development scheme should aim to minimise hard bankside engineering, promoting more natural riverine features.

The Environment Agency is in general opposed to culverting of watercourses because of the adverse ecological and flood defence effects. In fact development proposals often give the opportunity for the reopening of culverted water courses, which can dramatically improve wildlife links and corridors as well as flood defence improvements.

CANALS

With specific reference to canals, any plans to restore them for navigation should include careful consideration of their ecological status.

Grassland

Improved/semi-improved, unimproved neutral and unimproved acidic are the three main types of grassland existing in the Borough.

Improved grassland is that which is usually close-mown and has been treated with herbicides and fertilisers. Whilst generally of limited value for wildlife, some birds and mammals can make use of this environment. Rough unmanaged grassland can be very good for mammals, amphibians and birds of prey.

Unimproved neutral grasslands are traditionally grazed in the winter and cut in late summer. If they escape treatment by fertilisers and herbicides, they are able to contain a wide variety of grasses and flowers. Much of the Borough's neutral grassland is found in the western and northern side, with some particularly good examples in the Hawkshaw area. Generally, this type of grassland will include a greater number of species of flowers, sedges and grasses.

Acidic grassland is generally found on the grazed moorland fringe areas in the north of the Borough. The acidity of the soil limits the species which are to be found. This type of grassland may provide habitat for birds such as curlew, snipe, skylark, whinchat and meadow pipits.

Creation

Grassland performs an important function for wildlife and, as such, can be a useful inclusion in any mitigation works.

It is important to ensure that a suitable soil is in place before creating a grassland feature. Soil or substrate with a low fertility is considered most suitable. In general, imported soil is too rich and contains the seeds from competitive species which may restrict the growth of the grassland. It should also be ensured that the area to be covered by grass is not too wet. Though including wet patches can increase diversity, as wet grassland is a rich habitat.

It is vital that expert advice is sought with regard to the most suitable seed mixture for a particular site. Local seed sources should be used. Once seeding has taken place it is not a case of merely leaving the grass to grow. The site will need intensive and thorough management for 3 to 5 years. As an alternative to seeding the site, it may be possible to translocate turf from an existing area of grassland that will be lost as a result of the development or by using local green hay. Again, expert advice should be obtained for both of these techniques to determine their suitability for the specific site.

Restoration and Management

Once a grassland feature has grown, it may need periodic restoration due to the development of bare patches or intrusion from undesirable species. Whatever the problem, it is important that the grassland is restored using traditional techniques. The use of herbicides or fertilizer will reduce the diversity of the grassland and so this should be avoided.

As stated above, in its early years of development a grassland feature will require intensive management. However, once the grassland is established, management usually takes the form of grazing or mowing. Management techniques vary depending on issues such as the specific location of the site, the size of the site and the topographical features of the site. It is important to obtain expert advice on this issue to determine the best method of management for the particular grassland in question.

Hedgerows

Traditionally hedgerows were planted to contain livestock and mark boundaries. However, changing agricultural practices led to the destruction of many hedgerows. As well as their historical importance, hedgerows are also important wildlife habitats and in recognition of these attributes, the Government has produced the Hedgerows Regulations which aim to protect “important” hedgerows from destruction.

Creation

When planting a new hedgerow it is important to use locally native trees. Whips of approximately 2 years should be used and it is recommended that at least 75% of a hedgerow should comprise Hawthorn with the remainder comprising a mixture of other shrubs such as Dog Rose, Holly and Hazel. In certain localities it may be appropriate to add approximately one standard tree every 30 metres such as Oak or Ash which should be allowed to grow through to maturity. The planting should be in a staggered, double row (0.25 metres between rows and 0.3 metres between each plant in a row). Newly planted hedges will usually need to be protected by fencing.

Restoration and Management

If a hedgerow is left unmanaged, it will become overgrown and less dense. The best forms of restoration for a hedgerow in this condition (if restoration is appropriate) are either hedge laying or coppicing. Intense growth will shoot from the stumps and create a more dense hedgerow if either of these techniques are employed.

Hedges are a man-made wildlife habitat and lose some of their individual value if they are left unmanaged. Hedges were traditionally planted in order to mark field, estate and parish boundaries and to contain livestock. To maintain their strength and thickness, a management process known as laying was adopted and is still considered to be the best form of management although it is not now widely used. Hedge laying is a skilled technique which involves partially cutting through the stems of the hedgerow, bending them over and weaving them together. As such, any developer considering using hedge laying should use experienced contractors.

Hedgerows can also be maintained by trimming on a three year rotation, with laying every 15–20 years, with the height between 1.5 to 2.5 metres.

APPENDIX 2 – POLICY EN6/4 OF THE BURY UNITARY DEVELOPMENT PLAN

The Borough's network of wildlife links and corridors forms only one element within the overall context of nature conservation in the Borough. Wildlife links and corridors are shown on the Bury UDP Proposals Map and Policy EN6/4 of the Bury UDP indicates how they are to be treated. The policy and its justification are set out below:

EN6/4 - Wildlife Links and Corridors

The Council will seek to consolidate and, where appropriate, strengthen wildlife links and corridors, and will not permit development which would adversely affect identified areas. In particular, the Council will seek to ensure that new development within or adjacent to identified links and corridors contributes to their effectiveness through the design, landscaping and siting of development proposals and mitigation works, where appropriate.

Justification

A network of wildlife links and corridors has been defined on the basis of the Phase 1 (1990/91) and Phase 2 (1991/92) Habitat Surveys of the Borough. Such areas are important as routes for species migration and dispersal and often comprise diverse semi-natural habitats. The identified network of wildlife links and corridors connects designated SBI's (Sites of Biological Importance) and other identified areas of high and medium wildlife value...

...For the purpose of clarification wildlife corridors are defined as major routes by which species migrate or disperse. Wildlife links are generally narrower than corridors but perform an equally important function and mainly consist of roadside verges, active or disused railway land and the Manchester, Bolton and Bury Canal.

The wildlife value of land depends to a large extent on its management. Thus, the management of land in accordance with nature conservation principles is necessary to generally enhance the quality and quantity of wildlife habitats. The Bury Wildlife Strategy outlines the requirements and methods of management for sites of nature conservation value, as well as promoting the social, educational and environmental benefits accessible natural areas can bring to the local community.

Existing wildlife corridors include:

- *The Irwell valley;*
- *The valley of Holcombe Brook;*
- *The valley of Hawkshaw Brook;*
- *The Kirklees valley;*
- *The Roch valley;*
- *Hollins Brook;*
- *Whittle Brook;*
- *The valley of Blackshaw Brook;*
- *The valley of Elton Brook.*

Existing wildlife links include:

- *The East Lancashire Railway line;*
- *The old railway lines to Bolton, Holcombe Brook and Ringley;*
- *The M62/M66 corridor;*
- *The Manchester, Bolton and Bury Canal;*
- *Manchester to Bury Metrolink.*

The Bury Unitary Development Plan (UDP) was adopted in August 1997.

Supplementary Planning Guidance has been produced in the form of Development Control Policy Guidance Notes to support the adopted UDP. These Notes give a more formal basis to advice which is given to applicants on a regular basis.

This Note was approved by the Council's Cabinet and Executive Committee (on 11th and 18th July Respectively). A statement on the consultation and publicity exercise undertaken in the preparation of this Note is available on request.

Any queries you may have regarding this Note or the Bury UDP in general should be directed to the UDP team on 0161 253 5283.