

Matthew Thomas  
Ecologist  
Brighton and Hove Council  
Stanmer Park,  
Lewes Road  
Brighton BN1 9SE

44 Havelock Road  
Brighton  
BN1 6GF

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Tel. 01273 507907  
info@Eco-Logically.com

Dear Matthew

## Responding to the Local BAP – *Eco-Logically* comments

### Summary

1. The opportunity to develop a consensus on biodiversity priorities across Brighton & Hove has been lost. If the clear intention to involve local businesses, organizations and knowledgeable individuals had been built into preparing this Local BAP we would have a clear action plan to set the future direction. Instead the Draft Local BAP is a shambolic mixture of phrases and unclear direction.
2. Greater attention could have been paid to how the Local BAP was to be produced following the stated desire to produce it in 2001 and 2002. Professional project planning even as late as 2010 will have helped to produce a plan 'fit for purpose'.
3. Promoting biodiversity is a formal Duty placed upon public bodies, including all Local Authorities. This Duty barely received 'lip-service' by Brighton & Hove council. Even a modest input of time will help inform senior planners, managers and elected members of this Duty.
4. Insufficient effort has been made to link the proposed Actions across Brighton & Hove with the wider framework in which Biodiversity Action Plan sits.
5. Whilst most of the comments below are justified in being critical of the gaps and failings in the Draft Local BAP, it must be welcomed that this Action Plan is finally being produced after an excessively long delay.
6. We hope that adequate resources can be provided by the council to ensure the Draft Local BAP can be substantially improved to ensure an Action Plan is produced during 2013 which provides both the strategic direction and clear objectives required to conserve and enhance our local biodiversity.

7. This representation is laid out in a structured way, with an Annex which should be considered to be part of the formal response. We start by reviewing the context in which biodiversity action planning appeared.

Where possible these comments follow the LBAP sections, however there are occasions when there is no relevant section yet. It is preferable to lay these comments out in one document to maintain a flow and integrity. This is consistent with the council's 'Statement of Community Involvement' where the consultees' preferred method of responding will be acceptable.

### Global Pressure

8. For many decades naturalists and conservationists have been commenting on the loss of natural habitats (95% of lowland meadows lost since WWII for example). Species have become extinct in southern England; otters and the black-veined white butterfly.
9. Most of the habitat and species losses are not 'natural events', but are part of a long-term trend. They are symptomatic of the human tendency to exploit natural resources. The desire to use land for building, farming and forestry overrides using it for nature. In simple terms, development planning has favoured economic and social objectives while virtually ignoring nature conservation objectives.
10. While small changes have been introduced at the local level, such as the establishment of the Nature Conservancy following WWII to meet the increasing demand for nature to be safeguarded, this did not address the Global Drivers for 'development'. Suddenly in 1992 there was a genuine massive change with the UN Summit on Sustainable Development, held in Rio. This 'Earth Summit' introduced the concept of 'Sustainable Development' where 1. economic, 2. social and 3. environmental objectives are all addressed in balance with each other.
11. To address the environmental elements of sustainable development one of the key outcomes from Rio was the 'Convention on Biological Diversity'. This Convention provided global level legitimacy for governments to ensure 'Biodiversity' was fully incorporated into their development plans.
12. In the UK we published the 'UK Biodiversity Action Plan' (UKBAP) which provided clear priorities, objectives and targets to achieve conservation of our biodiversity through the actions which could be co-ordinated via Local Authorities. The Association of Local Government Ecologists (ALGE) stated that "Local Authorities were best placed to deliver on local action...".
13. It would appear the Global concern and pressure for action provide legitimacy and a clear mandate for progressing nature conservation across the new Unitary Authority of Brighton and Hove. The timing was perfect. Local nature could be safeguarded and enhanced through the collaboration of local stakeholders, businesses, groups and individuals to prepare and then implement the 'Local Biodiversity Action Plan' (Local BAP, or LBAP).

**This summarizes where we had reached up until the start of the 21<sup>st</sup> Century.**

## A dismal plan

14. Above all the Local BAP should be inspiring. This is fundamentally based upon our shared spiritual, emotional and personal connections with nature. It is from nature that we originate as living creatures. There is no sense of wonder or vitality in this Draft LBAP. It could serve as a call for action to conserve and improve our shared local biodiversity inheritance.
15. Nature has been turned into just another commodity by some planners. A resource to exploit in providing 'Ecosystem Services' to people. The Local BAP should go to the heart of nature and life itself being vitally important to everybody. At the very least it should raise this point and refer to the 'intrinsic value' in nature. This is detailed further in the Appendix in relation to the England Biodiversity Strategy.
16. Despite the huge desire for a Local BAP amongst those interested in wildlife. And the obligation on Local Authority Development Control and Planning Departments to ensure biodiversity is fully incorporated into 'Local Plans' and the 'Local Development Framework' (LDF) this has not been actively progressed by the council.
17. First suggested in 2001 by the council's own 'Wildlife Advisory Group' that it will be important to prepare a LBAP, this was merely noted, there was no follow-up action. The council ceased supporting the WAG at an insulting meeting in September 2009 and has since failed to engage or involve naturalists over planning or policy issues.
18. Instead of positively engaging with the nature conservation community to stimulate production of the LBAP as a shared action plan only minimal discussion was held and the issues covered largely address the council's own interests.
19. A dismal bland document is the result. This 'ticks' the section on a 'jobs to do' list, but falls far short of fulfilling the key objective:

**'To achieve our local targets set out in the Sussex Biodiversity Action Plan'**

(source: 'The Natural Environment', Sustainability Strategy. 2002.  
Brighton and Hove City Council)

20. The whole point in preparing a Local Biodiversity Action Plan is to have a 'process' where others can become involved. Ideally it will be stimulating, inspiring and informative to help set the strategic direction for Biodiversity Action locally. It will directly help inform the LDF and inform forward planning for the whole city by identifying the key biodiversity features and how these can be enhanced. At the very least it will progress Brighton and Hove's contribution to the Sussex BAP and England Biodiversity Strategy. This Local BAP barely manages to make the links with the wider context, let alone help progress the detailed actions needed.
21. The council has had opportunities to progress a Local BAP since 2001, but instead chose to ignore these saying "*it is too complex...*" or "*nobody is interested in biodiversity*". Rather than attempt to clarify the local biodiversity features and how local residents and businesses relate to these in progressing a Local BAP the council has decided to focus all its efforts and resources on seeking the 'Biosphere Reserve' status, awarded by UNESCO to a few areas across the world each year.

If only one quarter of the resources and effort spent on 'Biosphere' conferences, events and literature had gone into preparing a Local BAP with the Universities, Biodiversity Record Centre and informed local stakeholders we would have a robust Action Plan to work with instead of the shambolic effort presented as a 'Draft Local BAP'. The 'disconnect' between the biosphere award ambitions and a formal Duty to promote biodiversity was most obvious at a conference held at Dorothy Stringer school in where the formal Biodiversity Duty was not mentioned once.

22. Local residents and businesses are well aware of how important the local environment is. This is one reason they live here rather than East Croydon. Sea, Downland and an escape for a dreary dark urban metropolis is why people are attracted to this area. Seeking a UNESCO Biosphere award will do little to change existing sentiment. We have a National Park which includes a significant area already within Brighton and Hove; we have the RSPB regional office close by Brighton Pavilion; we have no heavy industry to support, no large areas of contaminated land.

We have Britain's first Green MP. We have a local authority run by a Green administration. We have a young aspirational population well aware of environmental issues and the green agenda. How will pursuing an award from UNESCO for Biosphere Reserve status make any significant difference to the current interest in the natural environment? The sentiment is already here. Surely the council's effort could have been used more wisely in progressing its formal duty to promote biodiversity rather than seeking an award which is more deserved by communities with genuine conflict between nature and the local community.

23. Brighton and Hove City Council has a responsibility to its citizens, to the local physical environment and to its natural environment. Part of its responsibilities include providing housing, education and employment. However wealth generation seems to be the primary driver for activity by the council.
24. There needs to be a balance. This point was also emphasized toward the end of the 20th Century with the concept of 'Sustainable Development'. Economic development was balanced with Social development and Environmental development.
25. Note that 'Development' has a different meaning to 'Growth'. Growth is simply expanding and enlarging. In a world of finite resources we cannot have '**sustainable growth**'. Development means improving, creating, understanding and sharing. It is part of our cultural evolution. '**Sustainable Development**' can progress with an intelligent investment into our shared human, cultural and natural resources.
26. The points above may appear to be somewhat academic. But in progressing Brighton and Hove's sustainable development the council could be taking the lead in finding new ways to develop our resources. It could be progressive and look beyond merely satisfying the wealthy businesses and individual influences. It could say 'No more Status Quo', in terms of exploiting our natural resources for the benefit of a few businesses and their owners which exert an excessively unbalanced influences on Directors, senior officers and councillors in this unitary authority.

27. These views are not unique. For example, in examining the apparent need to constantly consume resources Oliver James recommended:

***'Reject much of the status quo.'***

English-speaking nations are designed to maximise the profits of a tiny minority of very rich people, not the citizens' well-being or, for that matter, the survival of the planet. This is crazy, and Erich Fromm was absolutely right to say that being well-adjusted to the status quo is a prescription for distress.'

[*'Affluenza'*, 2007, Oliver James]

28. This opportunity to promote a truly sustainable and balanced way of life could have been actively seized by a council which portrays itself as being innovative and dynamic. It could have promoted the cross-sectoral '*...new economy...an inspiring, believable vision of what it can be*' (Dr Caroline Lucas, the UK's first Green MP, on 'The New Economics – A Bigger Picture', 2009, NEF pub. Earthscan).

### How to improve the Local BAP – recommended changes

29. The biggest failing in this LBAP is there is no clear aim. What is it aiming to achieve? At the very least this fundamental aim needs to be explicitly stated so we can tell whether it has been achieved. Also, future reviews of the LBAP will be structured around this key aim.
30. This lack of an aim for the LBAP overall (not the detailed habitat/species aims) is the result of a lack of professional project management. Recommendations made over a decade ago were never followed through (Ref: Sustainability Strategy, 2002, Brighton and Hove City Council, Toward a Local Biodiversity Action Plan, 2003, BHCC Wildlife Advisory Group)

Winston Churchill said:

**"He who fails to plan is planning to fail"**

31. Similarly, as no meaningful attention was paid to planning how the LBAP will be progressed, in collaboration with other stakeholders, we have a disjointed document that is unlikely to succeed in anything apart from the most prosaic actions. In terms of sustaining and enhancing our local biodiversity it is indeed likely to fail.
32. Sustainability lies at the core of development planning. However the Draft LBAP makes only scant references to this. Biodiversity can be seen as an indicator of sustainable development. The intention in 'Principal 2' is not expanded elsewhere. Merely stating 'Brighton and Hove Council ...will have fully integrated biodiversity into the development control process,...' needs to be expanded into measurable actions elsewhere.
33. How much land to be managed for biodiversity objectives? A figure for the area of land to be managed for biodiversity is fundamental to setting the context for the LBAP's aim. This should not just be left to land in the South Downs National Park, but integrated across all land to the south. Unfortunately, such areas outside the

National Park are now formally referred to as 'Urban Fringe'. This includes land such as 'Toad's Hole' with its reptile and invertebrate populations or woodlands and fields near Hollingbury and Withdean Park. This is an indication of the council's intentions to exclude biodiversity objectives for land outside the National Park.

It is recommended that **at least 20% of the land area south of the NP boundary is managed with biodiversity as a key objective.**

34. How many people can live within the Authority's boundary? Levels of consumption are continually increasing. There are massive demands placed on local living resources, particularly housing need and freshwater supply. The waste produced within Brighton and Hove is partially being exported to waste sites in Hampshire or Kent?

It is recommended that the LBAP should explicitly state **there are sustainability constraints on levels of consumption by the local population living here, without harming environmental features, environment resources or the local biodiversity.** Justification for explicitly stating this fact is provided in the UKBAP, Aichi Biodiversity Targets and the UN Millennium Development Goals (See Appendix). Whilst the concept of limiting the city's population size is unattractive to many politicians this is an essential component for sustainability. Failure to actively manage the city's population size will result in an increasingly unattractive city dominated by steel, concrete and glass high-rise buildings.

35. Additional support for adopting a radical position in identifying constraints on the city's population density relate to **levels of consumption.** This has been examined in the Royal Society's report and should be referenced. 'People and the planet'. April 2012. The Royal Society Science. Policy Centre report 01/12. John Sulston (chair). DES2470.

### Conclusion

36. It is with regret that we have to send such a critical response to this Draft of the Local BAP. As the council is aware, ***Eco-Logically*** is totally committed to meaningful nature conservation policies and meaningful action on the ground. The LBAP as currently drafted falls far short of advancing such policies or actions.

**We all deserve so much better from our council in leading on the development of a shared, collaborative Local Biodiversity Action Plan.**

As ever, we will be pleased to provide a detailed input to preparing the Local BAP in due course. However the council will need to demonstrate a genuine meaningful commitment to progressing the preparation of the Local BAP.

Yours,

John Patmore  
Naturalist

# **APPENDIX**

## **Responding to the Local BAP – *Eco-Logically* comments**

While the covering letter addressed the more generic points, details are provided in this Appendix. Both the covering letter and Appendix should be taken equally together as the formal response from *Eco-Logically* to this consultation.

On an earlier consultation (Local Development Framework SPG on 'Nature Conservation') detailed comments were submitted. However there was no response from the council to the points raised. There was no dialogue, as would be expected when holding a 'consultation'. This included concerns that the invasive climbing plant Virginia *Parthenocissus quinquefolia* was being recommended for improving the local biodiversity. This plant is listed on Schedule 9 as being unlawful to plant. It is inefficient to devote too much time to elaborating on each point, if it is only to be ignored. Consequently the detailed points below are listed in brief summary form with minimal structure. Each can be expanded upon further if the council is interested in conducting a full formal consultation.

- Refer to England Biodiversity Strategy Objectives and Actions. These are available and should clearly stated. The response by Brighton and Hove's Wildlife Forum has included further details of the 'England Delivery Plan'.

### **England Biodiversity Strategy**

- The main priorities for action should include:
  - 10. Delivering the strategy and measuring progress
  - • supporting delivery of the strategy  
Biodiversity is important for its own sake, and human survival depends upon it.  
[note: the 'Intrinsic Value' of nature is acknowledged here ]
- ...mission for this strategy, for the next decade, is:
  1. to halt overall biodiversity loss,
  2. support healthy well-functioning ecosystems and establish coherent ecological networks,
  3. more and better places for nature for the benefit of wildlife and people.

### **Priority 1: A more integrated large-scale approach to conservation on land and at sea**

- 14. Establishing a wildlife sites network would effectively conserve biodiversity and ecosystem services. Needs a more effective, more integrated, landscape-scale approach.

### **Priority 2: Putting people at the heart of policy**

16. Engage more people in biodiversity to know what they can do to help. Civil society organisations play a front line role - we will work with them to empower more people

17. Getting more children learning outdoors, increasing schools' abilities to teach outdoors.

17. New green areas designation, protecting local environments.

17. Provide funding to support the Big Wildlife Garden scheme and launch a new phase of the MuckIn4Life campaign, to improve the quality of life in towns, cities and countryside.

18. Biodiversity provides a range of benefits to people, achievement of biodiversity outcomes

### **Priority 3: Reducing environmental pressures**

19. Ensure we reduce direct pressures on biodiversity. [for example: Toads Hole Valley development]

20. We have identified the key sectors, include:

- Agriculture
- Planning and Development
- Water [Brighton's water supply aquifer]
- Marine Management [Coastline conservation, and also biodiversity in Marina ]

21. Tackle air pollution and invasive non-native species. [The Level/Lewes Road air quality. Invasive species, *Buddleja* and *Parthenocissus quinquefolia* ]

### **Priority 4: Improving our knowledge**

22. A good evidence base. The UK is also the first country to have undertaken a complete assessment of the benefits that nature provides, through the innovative NEA. [Audit Brighton and Hove's nature resource, prepared a base point and then Monitor changes]

23. Gaps remain, evidence is only helpful if it is accessible. Power to support local people to act and hold others to account.

### **Outcomes**

Outcome 1 – Habitats and ecosystems on land (including freshwater environments)

By 2020: biodiversity is maintained and enhanced

further degradation has been halted

restoration is underway

to deliver more resilient and coherent ecological networks, healthy and well-functioning ecosystems, including:

- 1A. Wildlife habitats with 90% of priority habitats in favourable or recovering
- 1B. More, bigger and less fragmented areas for wildlife, an increase at least 200,000 ha of priority habitats.

- 1C. By 2020, at least 17% of land and inland water improved through management of our existing systems of protected areas and the establishment of nature improvement areas.
- 1D. Restoring at least 15% of degraded ecosystems-contribution to addressing climate change.

## Outcome 2 – Marine habitats, ecosystems and fisheries

By 2020 biodiversity is maintained, further degradation has been halted for safe, productive and biologically diverse oceans and seas.

- 2A. By 2016 25% of English waters will be in a Marine Protected Area network
- 2B. By 2020 managing and harvesting fish sustainably
- 2C. By 2022 marine plans covering the whole of England's marine area.

## Outcome 3 – Species

By 2020 improvement in the status of our wildlife, prevented further human-induced extinctions of known threatened species.

## Outcome 4 – People

By 2020 people will be engaged in biodiversity issues, aware of its value and taking positive action.

Period 2011-2020 is the "United Nations Decade on Biodiversity".

People value the natural world in many different ways and for different reasons. These include valuing it for its own sake (sometimes called its 'intrinsic' or 'existence' value), because it makes our streets and gardens more attractive, or because people enjoy experiencing nature-rich green places for recreation, whether a walk in a park or in relatively wild places such as National Parks. Others enjoy bird watching.

Many people feel instinctively that regular opportunities to experience natural environments have quantifiable positive impacts on our mental and physical health. All can motivate people to take or support positive action for biodiversity.

The level of direct contact with nature is a factor in influencing attitudes towards it. The more we can stimulate interest in and access to nature, the more people will be willing to contribute to its protection and enhancement.

## Climate Change

1.11 In the longer term, 22% of priority habitats are at high risk of direct impacts, including montane habitats, grazing marsh, saltmarsh and lakes. Marine ecosystems are likely to be particularly seriously affected, including as a result of ocean acidification due to rising CO2 levels.

1.12 We need to help increase resilience to climate change and other pressures. Priority action: Establish more coherent and resilient ecological networks on land that safeguard ecosystem services for the benefit of wildlife and people

2.5 The Making Space for Nature summarised: better, bigger, more, and joined.

- Better: we will improve the quality of priority habitat
- Bigger: we will increase the size of remaining areas of priority habitat where appropriate
- More: we will create new areas of priority habitat where appropriate
- Joined: we will enhance ecological connections between priority habitat

Priority action: Establish network of marine protected areas

- establishment network of Marine Protected Areas (MPAs) part of Marine Strategy Framework Directive.
- By 2016 excess of 25% English waters in well-managed Marine Protected Area network.

Priority action: action for priority species, not delivered through wider habitat-based and ecosystem measures

- Greatest priority will be given most risk of extinction, and those for which England has international responsibility. ...supporting communities in 'adopting' locally-relevant species.
- Relevant species given sufficient protection
- We will reduce wildlife crime

Priority action: Work with biodiversity partnership to engage more people

2.7 People are at the heart of this biodiversity strategy and involving the wider public is an important consideration across many of the conservation actions set out under the strategy, not just those with the primary aim of public engagement. Civil society organisations play a critical front line role directly engaging and enthusing the public about biodiversity and the wider natural environment such as geodiversity, and this priority is a call for renewed and expanded action. Government will contribute primarily by helping facilitate the sector in this role and creating the conditions whereby people are empowered to make a difference.

- establish working group to address this key action more effectively in future... how government might provide support. Will also need to consider opportunities for synergies and greater collaboration by the partnership, and also how greater community engagement can be supported.

2.8 Government decentralisation and localism agenda will empower local communities to have more influence over local decisions. key reforms, including:

- Improving public health locally, by making high quality green space available to everyone;
- Action to get more children learning outdoors, become more effective in engaging schools.
- A new green areas designation, empowering communities to protect local environments that are important to them.
- Help for everyone to 'do the right thing', For example, we will provide funding to support the Big Wildlife Garden scheme and launch a new phase of the MuckIn4Life campaign, offering volunteering opportunities to improve the quality of life in towns, cities and the countryside;
- Help for public bodies to fulfil their 'biodiversity duty', by developing tools and guidance for them to use, and by raising the profile of this duty with Parish Councils

Priority action: Values of biodiversity in public, private sector decision-making. Refer to 'Mainstreaming sustainable development – The Government's vision and what this means in practice'. Natural Environment White Paper sets out wide range of further relevant action;

#### General

- The consideration of nature's value in all relevant Impact Assessments.
  - natural capital in national accounts alongside GDP, Further research needed following NEA.
  - Actions to support green goods and services, expanding the opportunities for UK business.
  - support businesses to promote natural capital...to address environmental impacts.
- Refer to Aichi Biodiversity Targets <http://www.cbd.int/sp/targets/> 'By 2020, at the latest...'
    - Strategic Goal A: Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society
    - Strategic Goal B: Reduce the direct pressures on biodiversity and promote sustainable use
    - Strategic Goal C: To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity
    - Strategic Goal D: Enhance the benefits to all from biodiversity and ecosystem services
    - Strategic Goal E: Enhance implementation through participatory planning, knowledge management and capacity building
  - Reference to 'Urban Commons' (toward the end of the LBAP and elsewhere) is not a useful term. This has no real meaning in terms of a recognized habitat type, which should be used instead (There are suitable NVC categories) and where there are associated species with biodiversity value these can be explicitly listed.

Another reason to use an existing recognized habitat classification category is to ensure this can be robustly defended in any future public enquiry. The 'urban common' term will be difficult to defend against a developer's barrister.

- Clearly link the LBAP to the Sussex BAP objectives and targets. They are vague at the moment. This should be referenced at the very least, or use hyperlinks on the on-line version of the LBAP.
- Linked to the 2010 Biodiversity Indicators produced by DEFRA. This should be referenced at the very least.
- Linked to 'Biodiversity 2020: A strategy for England's wildlife and ecosystem services' with clear references being provided for the appropriate paragraphs.
- Link to 'Biodiversity Opportunity Areas' which have been identified for Brighton and Hove these are:

129 Adur to Newtimber including Mill Hill  
 130 Crooked Moon to Thundersbarrow  
 131 Brighton and Hove urban green network  
 132 Benfield to Hangleton  
 133 Stanmer and Ditchling Downs  
 134 East Brighton Downs

(refer to: <http://www.biodiversitysussex.org/landscapes/> )

- Include Locally important Geomorphological Features such as coastal shingle and four Local Geological Sites:

TQ20/121 The Goldstone, Hove Park  
 TQ30/135 Stanmer Village  
 TQ30/236 Black Rock, Brighton Marina  
 TQ40/174b Coastal section: Friar's Bay to Brighton Marina

PPS 9 - Biodiversity and Geological Conservation is replaced by the new NPP Framework, the guidance which went with PPS 9 is retained (i.e. Ref 24 in 113 refers to Government Circular 06/2005: Biodiversity and Geological Conservation - Statutory obligations and their impact within the planning system).

Also retained is Local Sites - Guidance on their Identification and Management (2006).

The NPPF refers to geodiversity in the following sections which should be stated in the LBAP.

Section 11. Conserving and enhancing the natural environment

109. The planning system should contribute to and enhance the natural and local environment by:

- \* protecting and enhancing valued landscapes, geological conservation interests and soils;
- \* recognising the wider benefits of ecosystem services;
- \* minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more

resilient to current and future pressures;

\* preventing both new and existing development from contributing to or being put at unacceptable risk from, or being adversely affected by unacceptable levels of soil, air, water or noise pollution or land instability; and

\* remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.

113. Local planning authorities should set criteria based policies against which proposals for any development on or affecting protected wildlife or geodiversity sites or landscape areas will be judged. Distinctions should be made between the hierarchy of international, national and locally designated sites, (\*24) so that protection is commensurate with their status and gives appropriate weight to their importance and the contribution that they make to wider ecological networks.

114. Local planning authorities should:

\* set out a strategic approach in their Local Plans, planning positively for the creation, protection, enhancement and management of networks of biodiversity and green infrastructure; and

\* maintain the character of the undeveloped coast, protecting and enhancing its distinctive landscapes, particularly in areas defined as Heritage Coast, and improve public access to and enjoyment of the coast.

115. Great weight should be given to conserving landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural Beauty, which have the highest status of protection in relation to landscape and scenic beauty. The conservation of wildlife and cultural heritage are important considerations in all these areas, and should be given great weight in National Parks and the Broads.

Sub-Point 24. Circular 06/2005 provides further guidance in respect of statutory obligations for biodiversity and geological conservation and their impact within the planning system.

117. To minimise impacts on biodiversity and geodiversity, planning policies should:

\* plan for biodiversity at a landscape-scale across local authority boundaries;

\* identify and map components of the local ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity, wildlife corridors and stepping stones that connect them and areas identified by local partnerships for habitat restoration or creation;

\* promote the preservation, restoration and re-creation of priority habitats, ecological networks and the protection and recovery of priority species populations, linked to national and local targets, and identify suitable indicators for monitoring biodiversity in the plan;

\* aim to prevent harm to geological conservation interests; and

\* where Nature Improvement Areas are identified in Local Plans, consider specifying the types of development that may be appropriate in these Areas.

From the Glossary: 'Geodiversity: The range of rocks, minerals, fossils, soils and landforms'

- **Common dormouse *Muscardinus avellanarius***

ADD links to reference material:

<http://webarchive.nationalarchives.gov.uk/20110303145213/http://ukbap.org.uk/UKPlans.aspx?ID=462>

Natural England Species Information Note SIN005

Sussex Woodland Habitat Action Plan, February 2010

'Hedgerows for dormice: improving wildlife corridors'. PTES, 2010

'Managing small woodlands for dormice: a guide for owners and managers. PTES

ADD objectives:

Sussex BAP:

Expand the current native woodland resource in Sussex by 3881 ha by 2015. A modest 50 ha of additional semi-natural woodland is recommended.

ADD: Active site management

- Sites supporting dormice should be identified and advice provided to land managers on appropriate management.

- Manage woodlands and hedgerows to maintain current populations and prevent further habitat fragmentation.

- Maintenance and restoration of woodland

As a general guide, hedge and woodland work is best carried out during November to February when dormice are likely to be hibernating below ground.

Rides and glades provide increased edge habitat within your wood and ensure light reaches the woodland floor.

Maintain tree branch connections over the rides at pinch points every 50m to enable dormice to travel throughout your woodland.

Some mature fruiting hazel should be retained along ride sides if possible.

Maintenance of hedgerows of very high environmental value

To produce the most suitable hedges for dormice, management should aim to produce thick bushy hedges that are 3 to 4 metres high. These are likely to only need cutting every third year or less and ideally one third of hedgerows should be left 7 to 10 years between cutting.

Encourage the favourable management of hedgerows and hedgerow trees. Halt the net loss of species rich hedgerows through neglect, removal or inappropriate management.

Restore hedgerows to benefit wildlife, particularly dormice, that depend on them by reversing the unfavourable condition of existing hedgerows

Seek to increase the numbers of native, species-rich hedgerows in favourable condition in Sussex.

Encourage planting of native, mixed hedgerows where compatible with landscape guidelines, particularly where they will help provide connectivity on a landscape scale. Species used should be compatible with that Character Area.

Maintenance and restoration of successional areas and scrub

Allow natural regeneration to occur and encourage structural diversity. This method of restocking the woodland can, if necessary, be reinforced by group planting species native to the site, and of local provenance.

In woodland that is deficient in natural tree holes, nest boxes can provide a suitable alternative. These could be erected at a density of 10-30 per hectare, though a higher density (36 per hectare) is recommended for dormouse population monitoring.

Manage sycamore: Sycamore can be beneficial for dormice in your woodland at low densities as it produces flowers and supports a high number of insects that dormice feed on. However, sycamore produces copious seed which, if left unmanaged, will produce stands of trees that quickly shade out the understorey. They can be managed by coppicing which will maintain the supply of insects without allowing them to seed. Excess saplings should be removed.

Working with local partners, establish a network of dormouse dispersal routes and potential habitat by restoring hedgerow corridors between isolated populations.

Support training in conservation of dormice both for land managers and advisers.

Incorporate National Dormouse Monitoring Scheme to local sites to obtain sufficient long-term data on which to assess the effects of site management and successional development.

Ensure that landowners, agencies and local authorities are aware of the requirements of the dormouse, especially the impact woodland and hedgerow management may have, and the effects of habitat fragmentation.

Ensure continued public awareness of this species as a key indicator of desirable woodland and hedge conditions.

Improve woodland and hedgerow management within Brighton & Hove.

- Ensure connectivity is maintained with the adjacent woodland and hedgerows in neighbouring authorities.

- **White-letter hairstreak** *Satyrium w-album*

- ADD REFERENCES TO:

1989 Section 9.5 Wildlife & Countryside Act 2010

Butterfly Red List - Endangered

JNCC Notification, see [http://jncc.defra.gov.uk/\\_speciespages/2586.pdf](http://jncc.defra.gov.uk/_speciespages/2586.pdf)

Butterfly Conservation website [http://butterfly-](http://butterfly-conservation.org/Butterfly/32/Butterfly.html?ButterflyId=52)

conservation.org/Butterfly/32/Butterfly.html?ButterflyId=52 AND

[www.butterfly-conservation.org/uploads/bc0010%20White-letter%20Hairstreak.pdf](http://www.butterfly-conservation.org/uploads/bc0010%20White-letter%20Hairstreak.pdf)

- ADD objectives:

- Ensure the planting of Dutch Elm disease resistant Elm in the English countryside
- Improve delivery of agri-environment and Woodland Grant schemes (appropriate hedgerow planting, woodland management)
- Ensure current management of remaining sites is appropriate (retaining elm trees, coppicing/suckering elm on a 10 year cycle, sensitive hedgerow management)
- Encourage monitoring (and survey), co-ordinated data and produce trend for UK and national indicators
- Include the establishment of butterfly gardens, majoring in nectar sources available June- August inclusive.
- Consider, where areas of Elm are lost to DED, replanting not only with disease resistant Elm, but also Common Ash, Field Maple and Lime, all thought to be important to this butterfly, the last especially as a nectar source. This would also provide diversification in the local tree stock in case of failure to control DED in the future.
- Pick up the recommendation in the National BAP and encourage the planting of more hedgerows on B&HCC farms including Elm to improve connectivity with wider countryside.
- Two excellent signs by the 'Preston Twins' illustrate the White-Letter Hairstreak and make the connection with Elm. More like this would help in the public education programme and thus with the survey needed to establish the levels of the local population.
- Consider raising it as a 'Flagship Species' for the city. Because of its connection with Elm – the city holds the National Collection – this makes it a suitable candidate as an indicator elm health.

- **Glowworm** *Lampyris noctiluca*

- ADD REFERENCES:

The UK Glow worm Survey website <http://www.glowworms.org.uk/conservation.org/>

- Glow-worm work in progress in some other counties is detailed on the following websites:

Essex glow-worm survey: <http://website.lineone.net/~galaxypix/instructions.htm>

Dorset (glow-worm hunt): [www.imagesofdorset.org.uk/Dorset/079/intro.htm](http://www.imagesofdorset.org.uk/Dorset/079/intro.htm)

British populations of *L. noctiluca* have decreased considerably in numbers over the last fifty years. It is anticipated that this decline is continuing to this day. Secondly, this decline is evident over the entire range of *L. noctiluca* in Britain. Thirdly this decline is not restricted to one particular habitat type. A fall in numbers has been observed equally in grassland, fenland, woodland and coastal sand dune habitats.

Little empirical data is available as to the actual causes of glow-worm population decline in Britain. A number of theories have been present and one which has been to be investigated is the impact of light pollution. However, much more work needs to be conducted in order to appraise the situation fully.

On pastureland, grazing systems should preferably be extensive and organic. The use of fertilisers and herbicides will degrade the habitat for molluscs and so deprive glow-worms of their food.

Scrub management is also an issue as scrub development reduces glow-worm habitat. Scrub clearance will be necessary on unmanaged sites such as disused railway lines

- The best form of grass cutting management may be no grass cutting at all during the glowing season (from the beginning of June until the middle or end of August) If cuts are vital, they should be kept high in order that the insects are not harmed.
  - Cut material should be left lying rather than collected
  - Cutting in wet weather should be avoided to prevent a thick mat of cut material being produced, which would be difficult for a glow-worm to navigate (Scagell 2003).
- On pastureland, grazing systems should preferably be extensive and organic. The use of fertilisers and herbicides will degrade the habitat for molluscs and so deprive glow-worms of their food.
- ADD the OBJECTIVES:
  1. To protect existing populations.
  2. To increase public awareness of glow-worms, their habitats, the threats they face and the need to protect them.
  3. To increase the number of glow-worms in Brighton & Hove.
  4. Determine the distribution and status of glowworms in Brighton and Hove.
  5. Ensure glowworms are identified and conserved, including protection from disturbance and inappropriate management.
  6. Monitor the main populations of glowworms to determine changing population levels .

- **'Boundary and Linear Features' including Roadside Verges**

- ADD REFERENCES:

Highways Agency BAP (currently under review)  
<http://www.highways.gov.uk/aboutus/1153.aspx>

West Sussex County Council Road Verges HAP Final Draft 2003  
[www.biodiversitysussex.org/file\\_download/61/](http://www.biodiversitysussex.org/file_download/61/)

Surrey County Council Road Verge HAP

[http://www.surreycc.gov.uk/sccwebsite/sccwspages.nsf/LookupWebPagesByTITLE\\_RT F/Road+Verge+Habitat+Action+Plan?opendocument](http://www.surreycc.gov.uk/sccwebsite/sccwspages.nsf/LookupWebPagesByTITLE_RT F/Road+Verge+Habitat+Action+Plan?opendocument)

### Road Verges: Ecological interest

1. The Road Verges habitat incorporates all road verges and pavements within the city boundary. It incorporates a wide range of habitats and contains a great many species.
2. Despite the variety of habitats included, this habitat is unique in that its management is all through the City Council, which presents a unique opportunity to the community.
3. The habitat totals XXha in area and comprises XXha of woodland XXha scrub XXha grassland, XX mature trees (XX = Data required)
4. Although road safety must be the prime consideration in the management of the road verges in Brighton and Hove, they nevertheless offer a substantial opportunity to improve biodiversity and enrich people's daily experience of their local environment by integrating biodiversity conservation into their design and management. This can be achieved by a variety of means, such as adapting existing planting to attract birds and invertebrates, or simply managing areas differently. There are also opportunities for more ambitious programmes to create entirely new habitats.

### Threats and Opportunities

1. Due to financial restraints, many road verges are managed in an increasingly uniform way which is quick and easy, but which offers few opportunities for biodiversity.
2. Public perception can prevent habitat creation on road verges. Often people associate wildlife with untidiness and unkempt spaces, although this can be avoided with careful site planning and management.
3. The city's road verges are easy to affect ecologically because they are managed by a single organisation
4. Road verges are a unique opportunity to bring people into close contact with biodiversity, with all its associated benefits to human health and well being.
5. In the case of road verges, people could contribute directly to BAP targets through the identification of areas of particular ecological interest close to their homes or workplaces.
6. A system of Verges of Conservation Importance could be instituted.

- **Marine Habitats – including Biodiversity Features in Brighton Marina**

- ADD REFERENCES TO:

- <http://jncc.defra.gov.uk/page-5706>
- Intertidal Chalk: <http://www.biodiversitysussex.org/habitats/intertidal-chalk>
- Intertidal Under Boulder Communities  
<http://www.biodiversitysussex.org/habitats/intertidal-underboulder-communities>
- Subtidal Chalk: <http://www.biodiversitysussex.org/habitats/subtidal-chalk>
- Subtidal Sand and Gravels:  
<http://www.biodiversitysussex.org/habitats/subtidal-sands-and-gravels>

The Kent LBAP has the following:

- Littoral Rock: <http://www.kentbap.org.uk/habitats-and-species/broad-habitat/littoral-rock/>
- Inshore Sublittoral Rock: <http://www.kentbap.org.uk/habitats-and-species/broad-habitat/inshore-sublittoral-rock/>
- Supralittoral Sediment: <http://www.kentbap.org.uk/habitats-and-species/broad-habitat/supralittoral-sediment/>
- Sublittoral Rock: <http://www.kentbap.org.uk/habitats-and-species/broad-habitat/supralittoral-rock/sediment>
- Inshore Sublittoral Sediment: <http://www.kentbap.org.uk/habitats-and-species/broad-habitat/inshore-sublittoral-sediment/>
- Littoral Sediment: <http://www.kentbap.org.uk/habitats-and-species/broad-habitat/littoral-sediment/>

The content in these are relevant to Brighton and Hove with sediment overlying the chalk based rock.

- INCLUDE:

- Intertidal Under Boulder Communities
- Inshore Sublittoral Rock
- Littoral Sediment
- Blue Mussel Beds – <http://www.biodiversitysussex.org/habitats/blue-mussel-beds-on-sediment>

- **Coastal Vegetated Shingle**

- ADD REFERENCES TO:

vegetation of drift lines: <http://jncc.defra.gov.uk/pdf/Article17/FCS2007-H1210-audit-Final.pdf>

perennial vegetation of stony banks) <http://jncc.defra.gov.uk/pdf/Article17/FCS2007-H1220-audit-Final.pdf>

Sussex HAP - <http://www.biodiversitysussex.org/habitats/vegetated-shingle>

- INCLUDE:

### **Conservation Objectives**

T1: Maintain total extent of coastal vegetated shingle habitat throughout the UK, and the structures, sediment and coastal processes that support them.

T2: Achieve favourable or recovering condition by appropriate management of XXha of coastal vegetated shingle systems currently in unfavourable condition by 2010. This should achieve the retention or enhancement of populations of BAP priority species associated with vegetated shingle.

T3: In key locations initiate restoration of shingle communities on arable land over shingle deposits by 2015.

A Maintain the total extent of coastal vegetated shingle habitat in Sussex with no net loss, and the structures, sediment and coastal processes that support them.

B Achieve favourable or recovering condition by appropriate management of 353 ha of coastal vegetated shingle systems currently in unfavourable condition by 2015.

C Initiate restoration of shingle communities on arable land at Rye and Dungeness over shingle deposits by 2015.

D Create 5 ha of vegetated shingle in the urban environment by 2015 through new development or small-scale habitat creation schemes.

- **Maritime Cliffs and Slopes**

- ADD REFERENCES TO:

UK BAP: [www.defra.gov.uk/page-5376](http://www.defra.gov.uk/page-5376)

Sussex HAP: <http://www.biodiversitysussex.org/habitats/maritime-cliff-and-slope>

- ADD Conservation Objectives:

#### National HAP

T1: Maintain the existing free-functioning maritime cliff & slope resource (including of cliff-top and slope habitat), estimated to be have a length of about 4500 km. This is essentially a 'no net loss' target that should take account of the balance between the extent of coast protection works and free-functioning cliff systems.

T2: No overall net loss of cliff and slope functionality as a result of coast protection or engineering works.

T3: Increase the extent of Maritime Cliff and Slope unaffected by coastal engineering/coast protection from 250km to 275km by 2020.

T5: Achieve favourable or recovering condition for 1,500 km/30% of maritime cliff and slope including cliff-top vegetation, by 2010.

Sussex HAP:

A Maintain the existing free-functioning maritime cliff and slope resource (including cliff top and slope habitat).

B Achieve favourable or recovering condition for 17 km of maritime cliff and slope including cliff-top vegetation, by 2015.

C Increase the area of cliff-top semi-natural habitats by 211 ha by 2015.

- **Vascular Plants**

The following plants have local biodiversity value and therefore merit inclusion in the Local BAP. In many cases they can be assigned to particular habitats and these are indicated (**Bold**). Their conservation objectives will often be similar as they can be used as **indicators** of local biodiversity quality, these are;

- A. Survey plant population at most appropriate time of year to obtain current datum for local population status.
- B. Ensure habitat is managed appropriately. This requires informing local site managers (and their sub-contractors) about the plant species' existence, biodiversity importance and recommended habitat management.
- C. Undertake monitoring at five year intervals to measure changes in population status and precise locations.
- D. Produce regular reporting system on the local population status to inform site managers and the local biodiversity groups.

In a few cases more detailed objectives are necessary. For example, shepherd's needle *Scandix pecten-veneris* grows on a wall and this will be damaged if the wall is cleaned or sprayed with herbicide by the site owner or the local highways agency.

*Atriplex laciniata* (**Coastal Vegetated Shingle**)

*Brassica oleracea* (**Farmlands, incorporating Arable Field Margins**)

*Cakile maritima* (**Coastal Vegetated Shingle**)

Red Star-thistle *Centaurea calcitrapa* (**Lowland calcareous grassland**)

White Helleborine *Cephalanthera damasonium* (**Lowland Mixed Deciduous Woodland**)

*Clinopodium acinos* (**Lowland calcareous grassland**)

*Coeloglossum viride* (**Lowland calcareous grassland**)

*Crambe maritima* (**Coastal Vegetated Shingle**)

*Cynodon dactylon* (**Maritime cliff and slopes**)

*Euphorbia platyphyllos* (**Lowland Mixed Deciduous Woodland**)

*Euphrasia pseudokernerii* (**Lowland calcareous grassland**)

Sea Heath *Frankenia laevis* (**Maritime Cliffs and Slopes**)

*Fumaria densiflora* (**Farmlands, incorporating Arable Field Margins. Parks and Gardens**)

*Fumaria parviflora* (**Farmlands, incorporating Arable Field Margins. Parks and Gardens**)

*Galeopsis angustifolia* (**Lowland Mixed Deciduous Woodland**)

*Gentianella amarella* ssp. *anglica* (**Lowland calcareous grassland**)

*Glebionis segetum* (**Farmlands, incorporating Arable Field Margins**)

*Hyacinthoides non-scripta* (**Lowland Mixed Deciduous Woodland**) - Ensure *H. non-scripta* specified in planting schemes as the hybrid bluebell is irreversibly reducing *H. non-scripta*'s local population extent

*Juniperus communis* (**Lowland calcareous grassland**)

*Lathyrus aphaca* (**Lowland calcareous grassland**)

*Limoniium hyblaeum* (**Maritime cliff and slopes**)

*Limoniium procerum* (**Maritime cliff and slopes**)

*Lithospermum arvense* (**Farmlands, incorporating Arable Field Margins**)

*Medicago polymorpha* (**Maritime cliff and slopes**)

*Mentha pulegium* (**Ponds**)

*Misopates orontium* (**Farmlands, incorporating Arable Field Margins**)

*Nepeta catantaria* (**Lowland calcareous grassland**)

*Ophrys insectifera* (**Lowland calcareous grassland**)

*Ophrys sphegodes* (**Lowland calcareous grassland**)

*Orchis ustulata* (**Lowland calcareous grassland**)  
*Orobanche elatior* (**Lowland calcareous grassland**)  
*Parapholis incurva* (**Maritime cliff and slopes**)  
*Phyteuma orbiculare* (**Lowland calcareous grassland**)  
*Poa bulbosa* (**Parks and gardens**)  
*Polygonum maritime* (**Coastal Vegetated Shingle**)  
*Polygonum oxyspermum* (**Coastal Vegetated Shingle**)  
*Salvia pratensis* (**Lowland calcareous grassland**)  
*Scandix pecten-veneris* (**Roadside verges - recommended category**) Ensure wall is not damaged, cleaned or sprayed with herbicide by the site owner or the local highways agency.  
*Silene noctiflora* (**Farmlands, incorporating Arable Field Margin, Lowland calcareous grassland**)  
*Silene nutans* (**Lowland calcareous grassland**)  
*Tephrosia integrifolia* (**Lowland calcareous grassland**)  
*Thesium humifusum* (**Lowland calcareous grassland**)  
*Ulmus spp.* (Brighton has the 'National Elm Collection' and justifies a detailed understanding of the varieties and locations within the local area and across all the council's landholdings)  
*Valerianella dentata* (**Farmlands, incorporating Arable Field Margins**)  
*Vicia lutea* (**Lowland calcareous grassland**)

- **INCLUDE: BSBI 'Axiophytes' relevant to Brighton / Hove:**

These can be included in the LBAP Appendix to ensure they are referred to in future. Specific objectives can be progressed as opportunities arise, such as through assessing Planning Applications.

*Acer campestre*  
*Agrimonia procera*  
*Allium ursinum*  
*Allium vineale*  
*Anacamptis morio*  
*Anacamptis pyramidalis*  
*Anemone nemorosa*  
*Anthyllis vulneraria*  
*Aquilegia vulgaris*  
*Arabis hirsuta*  
*Arenaria serpyllifolia*  
*Armeria maritima*  
*Asperula cynanchica*  
*Aster tripolium*  
*Atriplex glabriuscula*  
*Atriplex littoralis*  
*Atropa belladonna*  
*Avenula pratensis*  
*Avenula pubescens*  
*Bidens tripartita*  
*Blackstonia perfoliata*  
*Brassica nigra*  
*Briza media*  
*Bromopsis ramosa*  
*Bromus commutatus*  
*Calamagrostis epigejos*

*Caltha palustris*  
*Campanula glomerata*  
*Campanula rotundifolia*  
*Campanula trachelium*  
*Carduus nutans*  
*Carduus tenuiflorus*  
*Carex caryophyllea*  
*Carex distans*  
*Carex nigra*  
*Carex paniculata*  
*Carex pendula*  
*Carex remota*  
*Carex sylvatica*  
*Carlina vulgaris*  
*Carpinus betulus*  
*Catapodium maritimum*  
*Catapodium rigidum*  
*Centaurea scabiosa*  
*Centaureum pulchellum*  
*Cerastium diffusum*  
*Cerastium semidecandrum*  
*Chaenorhinum minus*  
*Cirsium acaule*  
*Clinopodium vulgare*  
*Cochlearia danica*  
*Crataegus laevigata*  
*Crithmum maritimum*  
*Dactylorhiza incarnata*  
*Dactylorhiza maculata*  
*Danthonia decumbens*  
*Daphne laureola*  
*Deschampsia flexuosa*  
*Dryopteris aemula*  
*Dryopteris affinis*  
*Eleocharis palustris*  
*Elytrigia atherica*  
*Epipactis helleborine*  
*Equisetum sylvaticum*  
*Erigeron acer*  
*Erophila verna*  
*Euonymus europaeus*  
*Euphorbia amygdaloides*  
*Euphrasia anglica*  
*Euphrasia nemorosa*  
*Festuca ovina*  
*Fumaria muralis*  
*Galium odoratum*  
*Galium verum*  
*Gentianella amarella*  
*Geranium columbinum*  
*Geranium pusillum*  
*Geranium rotundifolium*  
*Glaucium flavum*  
*Glaux maritima*

*Helianthemum nummularium*  
*Helleborus viridis*  
*Hieracium agg.*  
*Hippocrepis comosa*  
*Holcus mollis*  
*Honckenya peploides*  
*Hordeum secalinum*  
*Hyacinthoides non-scripta*  
*Hypericum humifusum*  
*Ilex aquifolium*  
*Inula conyzae*  
*Iris foetidissima*  
*Kickxia spuria*  
*Knautia arvensis*  
*Koeleria macrantha*  
*Lamiaeum galeobdolon*  
*Lamium amplexicaule*  
*Lathyrus nissolia*  
*Legousia hybrida*  
*Leontodon hispidus*  
*Leontodon saxatilis*  
*Lepidium campestre*  
*Lychnis flos-cuculi*  
*Lysimachia nemorum*  
*Lysimachia nummularia*  
*Malva neglecta*  
*Melica uniflora*  
*Menyanthes trifoliata*  
*Milium effusum*  
*Moehringia trinervia*  
*Montia fontana*  
*Neottia nidus-avis*  
*Oenanthe pimpinelloides*  
*Ononis repens*  
*Ophioglossum vulgatum*  
*Ophrys apifera*  
*Orchis mascula*  
*Ornithopus perpusillus*  
*Oxalis acetosella*  
*Papaver argemone*  
*Papaver dubium ssp. dubium*  
*Papaver dubium ssp. lecoqii*  
*Papaver hybridum*  
*Parapholis strigosa*  
*Petroselinum segetum*  
*Phyllitis scolopendrium*  
*Plantago maritima*  
*Plantago media*  
*Poa angustifolia*  
*Poa humilis*  
*Poa nemoralis*  
*Poa pratensis*  
*Polygala vulgaris*

*Polypodium vulgare*  
*Polystichum setiferum*  
*Populus tremula*  
*Potamogeton crispus*  
*Potentilla anglica*  
*Potentilla sterilis*  
*Primula veris*  
*Primula vulgaris*  
*Prunus avium*  
*Puccinellia distans*  
*Quercus petraea*  
*Radiola linoides*  
*Ranunculus auricomus*  
*Ranunculus bulbosus*  
*Ranunculus sardous*  
*Raphanus raphanistrum ssp. maritimus*  
*Rhinanthus minor*  
*Ribes nigrum*  
*Ribes rubrum*  
*Rorippa sylvestris*  
*Rosa arvensis*  
*Rosa micrantha*  
*Rosa rubiginosa*  
*Ruscus aculeatus*  
*Sagina apetala*  
*Sagina maritima*  
*Salvia verbenaca*  
*Sanicula europaea*  
*Saxifraga tridactylites*  
*Scabiosa columbaria*  
*Schedonorus giganteus*  
*Senecio erucifolius*  
*Senecio viscosus*  
*Silene uniflora*  
*Silene vulgaris*  
*Sison amomum*  
*Sorbus aria*  
*Spergularia marina*  
*Spergularia rubra*  
*Spirodela polyrhiza*  
*Stachys palustris*  
*Stellaria pallida*  
*Suaeda maritima*  
*Succisa pratensis*  
*Symphytum officinale*  
*Tamus communis*  
*Thalictrum flavum*  
*Thlaspi arvense*  
*Thymus polytrichus*  
*Thymus pulegioides*  
*Tilia cordata*  
*Tilia platyphyllos*  
*Torilis nodosa*  
*Trifolium arvense*

*Trifolium campestre*  
*Trifolium fragiferum*  
*Trifolium medium*  
*Trifolium ornithopodioides*  
*Trifolium scabrum*  
*Tripleurospermum maritimum*  
*Trisetum flavescens*  
*Valerianella locusta*  
*Veronica anagallis-aquatica*  
*Veronica catenata*  
*Veronica montana*  
*Viburnum opulus*  
*Vicia lathyroides*  
*Viola hirta*  
*Viola reichenbachiana*  
*Vulpia bromoides*

- **Wood-Pasture and Parkland**

This is all about Council owned gardens, with very little to do with Parks.

There are no web-links, and other references to woodland biodiversity are not clearly provided.

ADD: FROM SUSSEX HAP:

Lack of younger generations of trees is producing a skewed age structure, which leads to breaks in continuity of dead wood habitat and loss of the species that depend on it.

Neglect and loss of expertise in traditional tree management techniques leads to trees collapsing or being felled for safety reasons.

Loss of veteran trees through disease, physiological stress and competition for resources with surrounding younger trees.

Planting tree species which are not ecologically appropriate to coastal plain or downland areas of Sussex.

Damage to trees and roots from soil compaction and erosion caused by trampling by property and building development, recreational activities and car parking.

Changes to ground-water levels as a result of abstraction, drainage and prolonged drought can lead to water stress and death of trees.

Isolation and fragmentation of wood-pasture and parkland sites threatens the species dependent on this habitat as many have poor powers of dispersal.

Inappropriate grazing levels can result in loss of habitat structure and scrub invasion if too low, or bark browsing, soil compaction and loss of ground flora where too high.

ADD CONSERVATION OBJECTIVES:  
FROM SUSSEX HAP:

Maintain and where possible improve the ecological integrity of parkland in Brighton and Hove.

Maintain and expand the range of parkland in Brighton and Hove.

1. Map all parkland in the city jurisdiction and ensure no loss of or significant damage to the extent of parkland sites.
2. Map all veteran trees in the city jurisdiction by 2015 and establish programme to plant new trees as needed to ensure no loss of continuity between veteran trees in the long-term.
3. 100% of the city's parkland to be in favourable or recovering condition by 2015.
4. Restore all areas of derelict parkland to favourable condition by 2015.
5. Expand the area of parkland, in appropriate areas, to help reverse fragmentation and reduce the generation gaps between veteran trees by 2015.

- **Lowland Beech and Yew Woodland, AND Lowland Mixed Deciduous Woodland**

- ADD FROM SUSSEX HAP:

THREATS AND OPPORTUNITIES:

Much woodland is left unmanaged or managed inappropriately, and traditional practices such as coppicing are being lost.

Changes in woodland structure can result from lack of management and excessive deer browsing.

Invasive species such as Sycamore, Rhododendron and Cherry Laurel can damage woodland habitat.

Climate change could result in changes in vegetation communities and put certain woodland types such as Beech woodland at risk.

Clearance for agriculture or development continues to fragment woodland habitat.

Contamination of the water supply or disruption of flow can affect certain woodland types.

Associated habitats such as woodland rides and glades are also declining from a lack of management.

Historic afforestation of native woodland with non-native species.

- ADD CONSERVATION OBJECTIVES:

Maintain and where possible improve the ecological integrity of woodland in Sussex. Woodland is a relatively small component of Brighton and Hove's habitat mosaic. All areas larger than one-tenth of a hectare (= one fifth of an acre) could be included within these HAP objectives.

1. Map all native woodland in the city jurisdiction and ensure no net loss of native woodland.

2. Achieve favourable or recovering condition of all native broadleaved woodlands larger than 0.1ha by 2015.

3. Expand the current native woodland resource in Brighton and Hove by 38 ha by 2015.

JM Patmore

*Eco-Logically*, Preston Park

3 September 2012