



CAMBRIDGESHIRE AND PETERBOROUGH BIODIVERSITY PARTNERSHIP PROJECTS REPORT 2006-2010

An analysis of the projects that have been supported by the Cambridgeshire and Peterborough Biodiversity Small Projects Fund

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Purpose

The work of the partnership has been crucial in conserving the county's biodiversity for the last 14 years and in view of the future impacts of climate change this work will become even more important in the following years. The current economic environment looks problematic for the future funding of conservation initiatives nationwide, therefore it is crucial that available funding is used to maximise conservation outcomes and conserve priority habitats and species. Currently project work has been approved on an ad-hoc basis, due to the ongoing realisations of conservation priorities and in response to project applications. However, this has led to the coverage of a good number of priority habitats and species.

The intention of this review is to look at past and current projects as a whole and analyse the coverage these projects have had of existing Biodiversity Action Plans (BAPs). Analysis has been attempted in the context of the existing wider work occurring within the county and in relation to wider conservation activity. The purpose of this is to assess how project funding would be most wisely directed in the future and to locate project areas and ideas which would provide the greatest opportunity for BAP coverage. Recommendations have been developed from this work which will hopefully highlight future opportunities to maximise conservation outcomes.

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1. Cambridgeshire and Peterborough Biodiversity Partnership Background

The Cambridgeshire and Peterborough Biodiversity Partnership promotes the conservation of habitats and species in Cambridgeshire and Peterborough through the production and implementation of Local Biodiversity Action Plans (BAPs). The plans outline the necessary action for the next 10 years to preserve and enhance biodiversity in farmland, woodland, wetland, grassland and urban areas.

These plans are implemented through project work undertaken by members within the partnership. Biodiversity Action delivery is the focus of the Projects Group and specific working groups. The partnership is formed from a range of organisations, bringing together members from local authorities, statutory environmental agencies and conservation charities. A Steering Group guides the work of the partnership.

Forty-five Habitat and Species Action Plans were produced in 1999, they have been reviewed in 2003 and 2008. The BAPs were partially monitored in 2002. A complete review of all the BAPS nationally took place in 2007, and local BAPS are monitored in a nationwide database, the Biodiversity Action Reporting System (BARS).

Threats to biodiversity in Cambridgeshire and Peterborough, as identified in Biodiversity Partnership vision in 2006	Partnership actions and projects targeting these threats
1. Global warming and climate change	Supporting and implementing projects that maintain and increase biodiversity. This increases natural resilience to climate change and its impacts.
2. Inappropriate land management practice and intensive agriculture	Engaging and advising local stakeholders in appropriate management practice.
3. Housing and infrastructure development	Producing communications for developers and raising awareness of the importance of urban sites for biodiversity.
4. Habitat fragmentation	Increasing connectivity of fragmented habitat through corridor restoration projects.
5. Invasive species	Supporting the removal of invasive species projects.

2. Projects Overview

Breakdown List of Projects

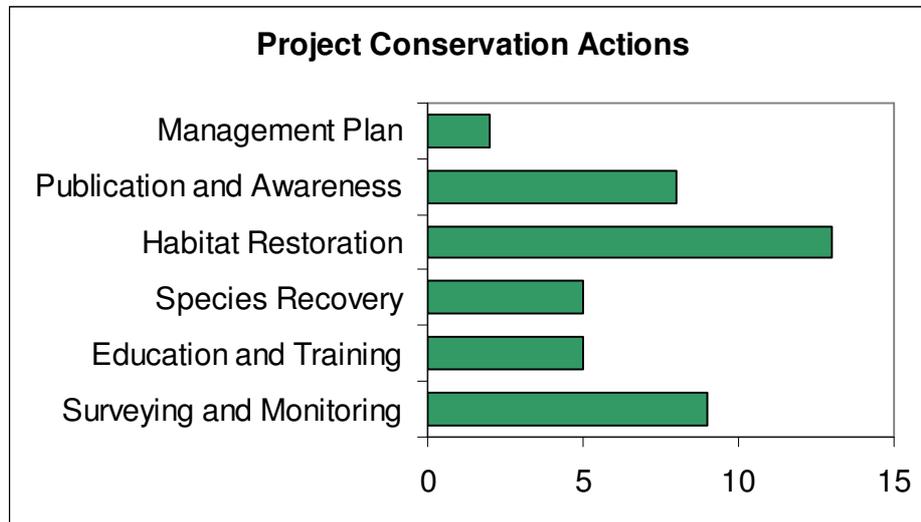
The list below covers all the 32 projects supported by funding from the partnership over the last 4 years, with countywide focussed projects highlighted in green.

No.	Project Title	SAPs/HAPs	Funding	Action	District
1	Brownfield Sites	Brownfield & Built Invertebrates	750	Surveying	Peterborough
2	Lillington Chalkpit	Lowland Calcareous Grassland	900	Restoration	South Cambridgeshire
3	Fowlmere	Chalk River	1000	Restoration	South Cambridgeshire
4	CRT Woodland Flora	Scrub Habitat	500	Restoration	South Cambridgeshire
5	School and Farm Wildlife	Arable and Hedgerow Habitat	3000	Education	Cambridgeshire
6	Four-spotted Moth	Four-spotted Moth Species	600+500+1500	Surveying, Monitoring and Species Recovery	Peterborough
7	HFFS 60 th Anniversary	Grasses species and grassland habitat	500	Publication	Huntingdon district
8	Docwras Meadow	Meadow and Grassland Habitats	914	Restoration	South Cambridgeshire
9	Stapleford Primary School	Pond Habitat	Not claimed	Restoration	South Cambridgeshire
10	Water Vole Support	Water Vole Species	3000	Species Recovery	Fenland District
11	Otter Recovery	Otter Species	3000	Species Recovery	Fenland District
12	Ponds For Life	Pond Habitat	2000	Training and awareness	Peterborough
13	Willow Pollarding	Barn Owl and Bat Species and Parkland Habitat	1500	Surveying and Restoration	South Cambridgeshire
14	Heydon Chalk Pit	Chalk Grassland Habitat	417.5	Restoration	South Cambridgeshire
15	Great Water Parsnip	Great Water Parsnip Species	1021.13	Species Recovery	Fenland District
16	Hundreds Hedgerow	Hedgerow Habitat	2000	Survey and Awareness	South Cambridgeshire
17	The Plight of the Bumblebee	Bumblebee Species	1400	Survey and Awareness	Cambridge City
18	Ufford Hedges	Hedgerow Habitat	1600	Restoration and Awareness	Peterborough
19	River Mel	River Habitat	2000	Restoration	South Cambridgeshire

20	River Cam	River Habitat	3000	Restoration	South Cambridgeshire
21	Pauline's Swamp	Pond and Grassland Habitat	2300	Monitoring and Education	East Cambridgeshire
22	County Wildlife Sites Aftermath Grazing	Grassland Habitat	1350	Restoration	Huntingdon district & South Cambridgeshire
23	Ely Wildflower Meadow	Grassland and Meadow Habitats	Subject to other funding	Restoration	East Cambridgeshire
24	Managing Elm for White Spotted Pinion Moth	Dutch Elm and White Spotted Pinion Moth Species	3000	Species Recovery	Huntingdon District
25	Melwood Management Plan	Woodland Habitat	600	Management plan	South Cambridgeshire
26	Witchford Wildflower Meadow	Grassland and Meadow Habitats	600	Restoration	East Cambridgeshire
27	Garden Watch	Domestic Garden Habitat	2850	Surveying, Education and Awareness	Countywide
28	Reptile Rummage	Allotment Habitat and Reptile Species	2878	Surveying, Education and Awareness	Countywide
29	Pond Assessment	Pond Habitat	3000	Surveying & Management plan	Countywide
30	Butterfly Atlas	Butterfly	750	Publication	Countywide
31	Orchard Survey	Orchard Habitat	2800	Survey	Countywide
32	Just Add Water	Ponds, Lakes and Reservoirs Habitat	2250	Publication and Education	Countywide

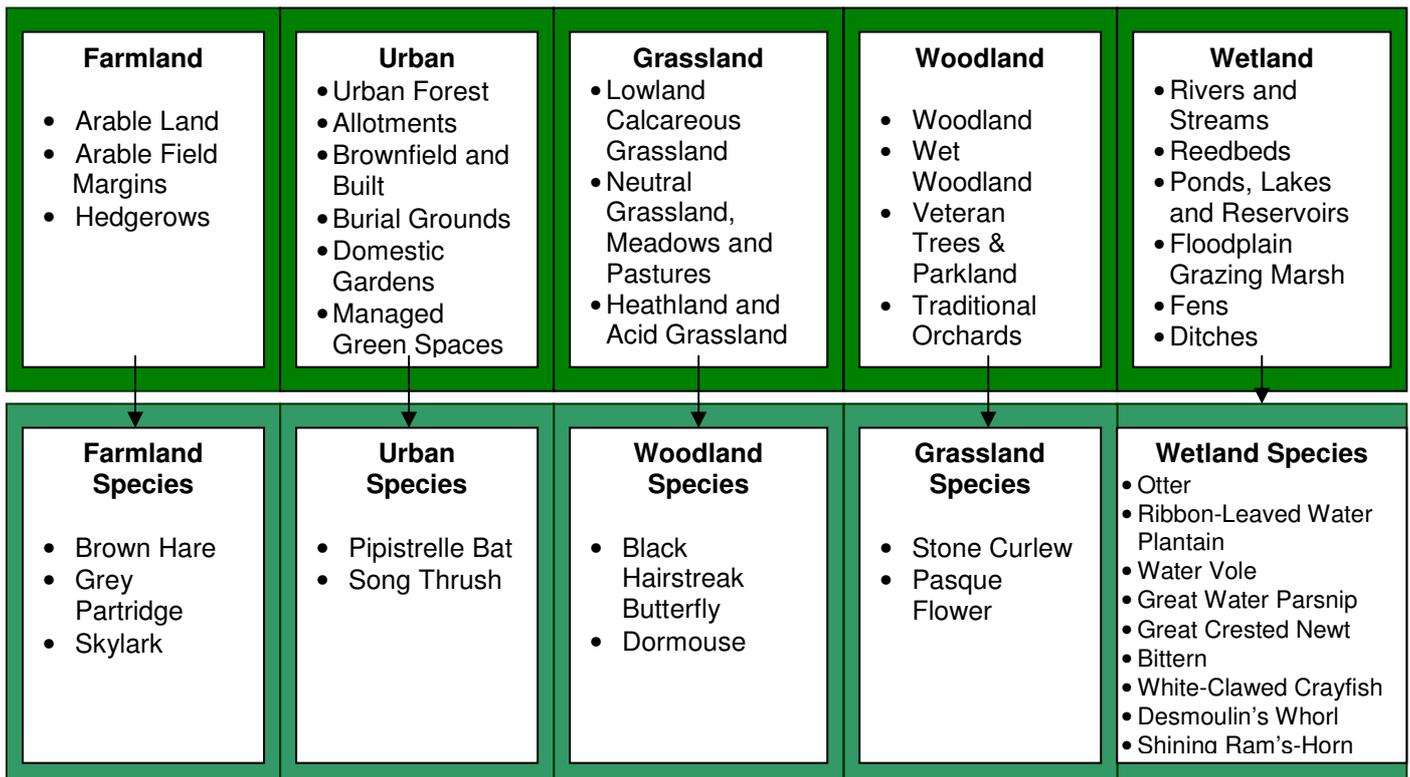
3. Projects Focus

The main areas of conservation action that the projects focus upon are habitat restoration, publication and awareness, and surveying and monitoring. The projects have produced many communications outputs for training and raising awareness, have provided important baseline ecological and monitoring data and have directly contributed to habitat restoration and species recovery.



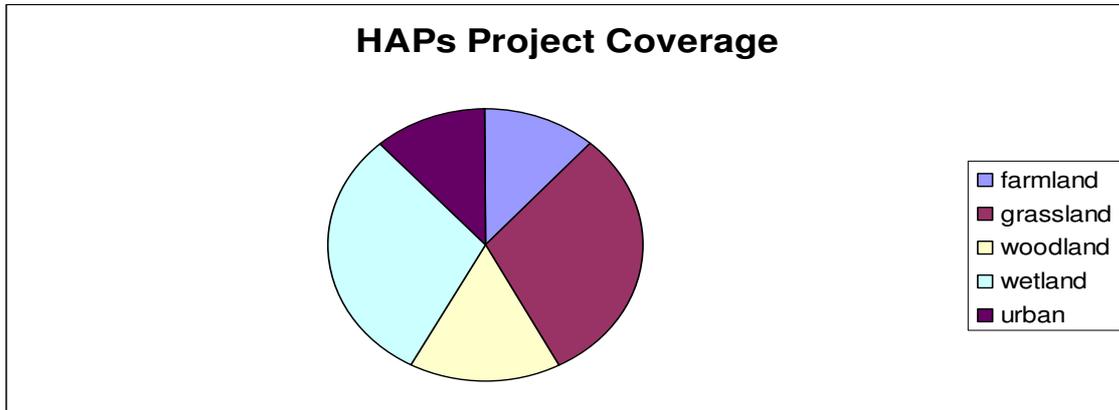
3.1 Local Biodiversity Action Plans

Action Plans have been developed within each of the 5 umbrella habitats for Cambridgeshire and Peterborough. Wetland and urban habitats have the highest numbers of Plans, with the majority of priority species occurring in wetland habitats also. Since the last BAP review, the Biodiversity Partnership focused mainly on BAP habitats, and the species BAPs weren't reviewed after the 2007 national BAP review. A list of all 2007 BAP species occurring in Cambridgeshire was produced and can be downloaded on the partnership website. Landscape conservation projects which encompass diverse wetland habitats and species would be valuable for targeting high numbers of Biodiversity Action Plans.



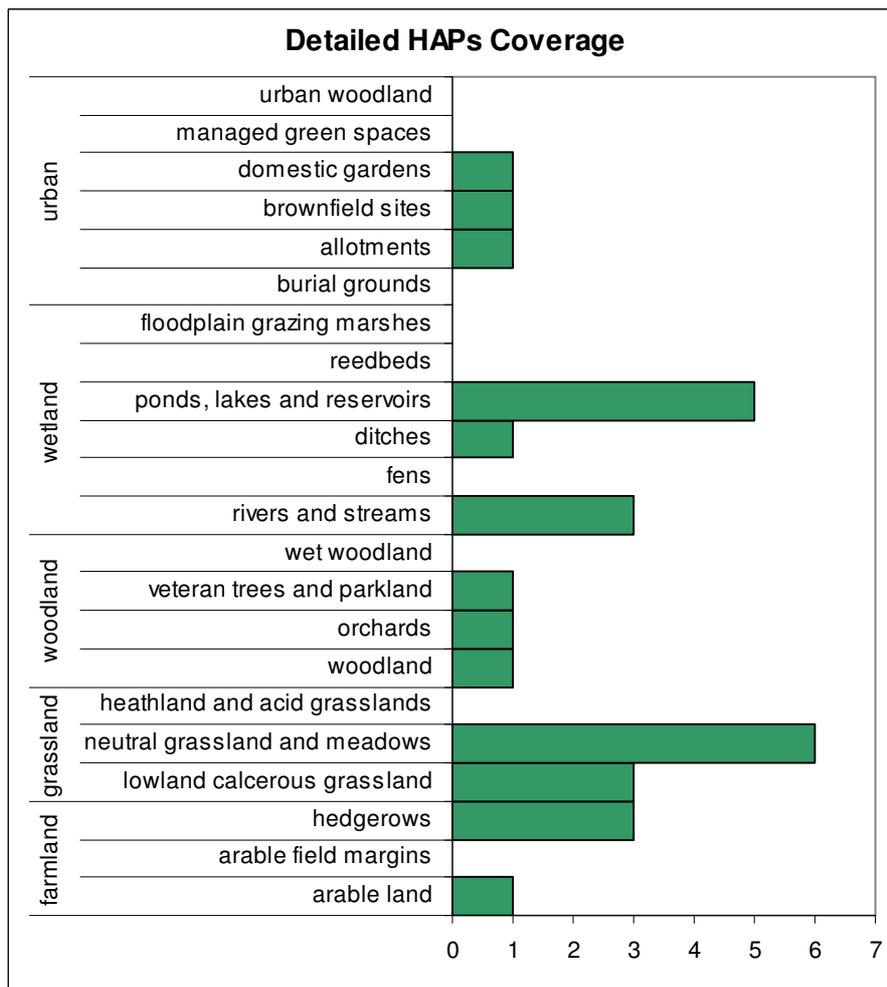
3.1 Projects Coverage of Habitat Action Plans

The majority of projects are focused at the habitat level.



Grassland and wetland habitats have been the focus for the highest numbers of projects, with urban and farmland having the lowest coverage. There is a high level of coverage of river systems and ponds, which are important habitats within Cambridgeshire and Peterborough's environments.

Detailed Projects Coverage of Habitat Action Plans



Explanations for Coverage

Grassland HAP has seen fair coverage due to the interest of the public in these areas as recreation spaces. Within urban HAPs, there are opportunities for development of projects for several of the HAPs and this could be an area for future funding support for the partnership. There is a noticeably limited coverage of the fens however there is the Great Fen project and the Wicken Vision, which will cover around 6000 Ha. Floodplain grazing marshes are included in much of the work with the Great Fen project and also has projects funded by RSPB such as Nene Washes. Several projects have involved ditch restoration, which was however not the targeted BAP of the project, ongoing work by Cliff Carson in the Middle Level is contributing much to this BAP. There is sparse woodland density across the county and the project fund coverage is therefore similar, however woodland projects would be an important area for supporting due to their limited extent. Grassland HAPs are well covered by the projects with the exception of heathland and acid grassland however there is low occurrence of the habitat in the county and sites are mostly within nature conservation sites.

Environmental Stewardship Coverage

Farmland covers an estimated 70% of the county which, when considered alongside the limited farmland project coverage, raises concern. However, farmland HAPs are covered within the stewardship grants system managed by Natural England and as such this area is not a high priority for funding from the partnership. Many members of the partnership engage local land owners in positive land management practices and work to raise awareness of the importance of positive land management. A brief overview of arable land, important for local BAPs, which has been involved in stewardship schemes from 2005 to 2009 would suggest that there is extensive coverage of these HAPs:

- 670 land owner agreements pertaining to **hedgerow** restoration and management which covers 926,560 m
- 1308 land owner agreements pertaining to **field margin** management and restoration which covers 3464 Ha
- 59 land owner agreements relating to **pond** creation, management and restoration which has a total area of 101,875 m²
- 584 land owner agreements relating to positive management of **grassland and pastures** which cover 8967 Ha

3.2 Projects coverage of Species Action Plans

Species level conservation has not been given the same focus as conservation at the habitat level. However by working at the habitat level many projects have consequently contributed to species level conservation as well, such as river and pond restoration projects benefiting different fish and amphibian species. There has been several species recovery projects which have targeted a total of 6 species recognised as a priority at the national and local level. Often the works carried out in these projects have also been important for other species or have created habitat which will benefit other priority species.

Species Specific Recovery Projects

- Great-Water parsnip
- White-Spotted Pinion Moth
- Dutch Elm
- Otter
- Water Vole
- Four-Spotted Moth

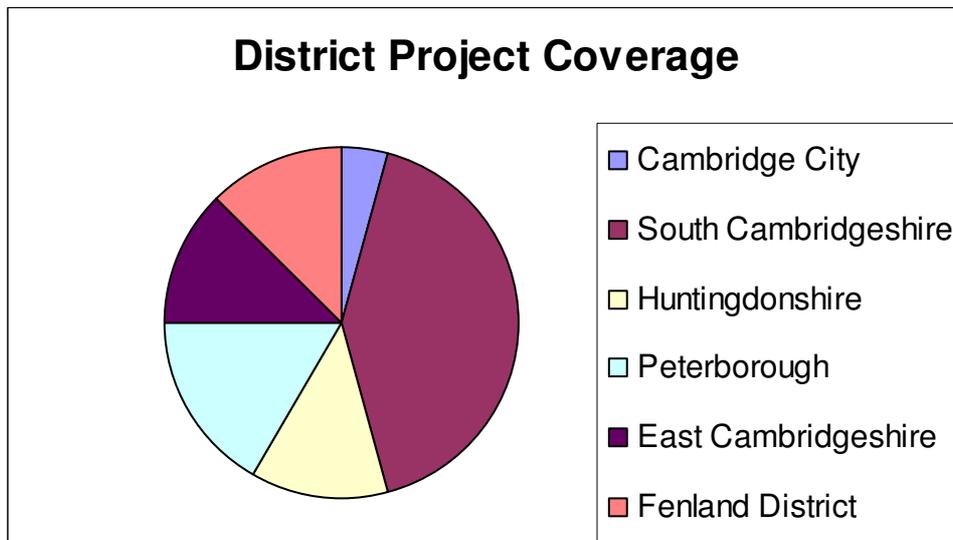
Species which have benefited from above projects

- Great Tassel Stonewort
- Tassel Stonewort
- Ribbon-leaved Water-plantain
- Tubular Water-dropwort
- Grasswrack Pondweed
- White-letter Hairstreak
- Black Hairstreak
- Grizzled Skipper
- Dusky-lemon Sallow Moth
- Goat Moth
- Grass Snake
- Common Lizard

Some projects have had a more general taxonomic focus for surveying or restoration:

- Reptiles
- Invertebrates
- Butterflies and moths
- Grasses
- Wild flowers

4. Projects Map



The results discussed in this section have been based upon the number of projects which have been undertaken at the district or lower levels and do not include countywide work. With the exception of South Cambridgeshire, the districts have seen a similar level of coverage. When you relate this to the area that the districts cover Huntingdonshire district would benefit from further projects within the area.

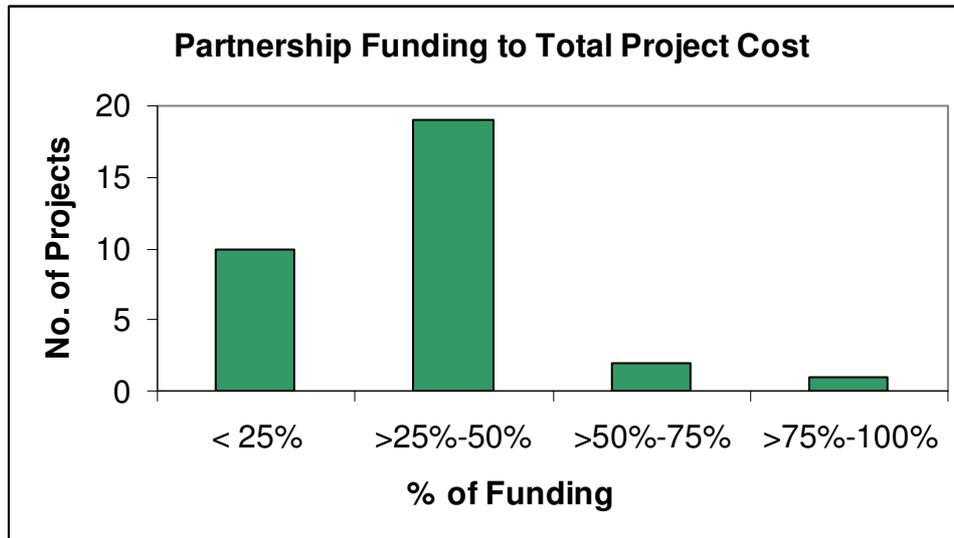
Huntingdonshire district	912 km ²
South Cambridgeshire	901 km ²
East Cambridgeshire	651 km ²
Fenland district	547 km ²
Peterborough	343 km ²
Cambridge city	41 km ²

The numbers in the map on the following page refer to the table of projects, presented on pages 5 and 6.

From the GIS analysis, it is apparent that in South Cambridgeshire areas currently without action are in the north and in the south east of the district. East Cambridgeshire would benefit from more conservation action in the south of the district. Across fenland, despite conservation action having covered a wide area, this still amounts to only 3 projects, which highlights the need for increased attention to this area, not just within fenland district but across the county. In Huntingdonshire, several projects have or will cover many different sites within the district so this has increased the area of project coverage within the county, with perhaps central Huntingdonshire having potential for investment. In Peterborough, survey work undertaken in the Brownfield and Built invertebrate survey was extensive in coverage, however conservation action would still be beneficial across the unitary authority.

5. Projects Funding

The partnership has currently funded a total of **over £50,000** during the last **4 years** to support **32 projects**. These **32 projects** have secured a total of **over half a million pounds** of additional funding from other sources for biodiversity. In several cases this additional funding was enabled by the third party contribution by the partnership. In the majority of cases the partnership funding contributed between 25-50% of the total project cost.



Through operating as a partnership and bringing together funding and support from all the districts, individually districts benefit greatly from increased numbers of projects happening in their area, as well as countywide, and higher levels of available funding.

6. Recommendations

Potential projects within HAPs

Within urban HAPs there are areas which could be developed upon, HAPs which could potentially lead to new project funding could be the development of urban forest and managed green space projects. Also burial grounds could offer a great potential project and in addition to covering important habitat could also cover several SAPs as these habitats are often refugia for many different species. Woodland projects would be great for future funding from the partnership with a particular area of wet woodland currently being with limited action, possibly covered within work occurring along the Ouse River. There could potentially be restoration activity of the Heath and acid grassland sites which are within CWS to ensure that the limited coverage of this habitat is well maintained. Reedbeds, are an extremely important habitat for many wetland species and their restoration is an important ongoing area for support. The extensive ditch network across the county is crucial habitat for many different species, and is a vital part of ecosystem function and for ecosystem services provision in their own right, there are 3 projects within this HAP, however this can still be developed. Priority species recognised as declining or locally important would benefit from being recognised in their relevant HAPs which could be updated to include recommendations for the positive management of these habitats considering the threats to the included species.

Potential projects within SAPs

According to Natural England there are 5 groups of species within the UK overall which are considered outstanding in international importance and many of these exist within the county:

- Ferns, mosses and lichens
- Breeding seabirds
- Wintering and passage water birds and gulls
- Grassland and woodland fungi
- Heathland invertebrates

Species level focus is clearly important when Cambridgeshire represents a significant part of the species range or is a stronghold for a high percentage of the population. This is however in a way also considering biodiversity within the wider landscape scale. It is crucial that species level work provides benefits for other important species and habitats as has occurred with the current work of the partnership. Conserving at the species level is an important way of ensuring ecological functions at the ecosystem level.

An assessment of the 2007 UK priority BAP species list in relation to partnership coverage and areas of work shows that at the species level, habitat restoration and taxa focused projects have led to fair coverage. Focus here has been given to herptiles, mammals, fish and bird species as these taxa are relatively more studied and have more data available.

Herptiles

Of the 10 species of amphibian and reptile which appear on the UK priority species list, 7 occur in the county. Within the county, several of these species are extremely rare, have small distribution or are data deficient. For the partnership, conservation action should focus on habitat restoration or landscape scale work, which tackles several species. Projects which include monitoring and surveying of distribution and density would also be important actions to gain a better understanding of where important areas are in the county for these species. Species which could benefit from specific direct actions, or which could be a focus of funding would be the **Great crested newt**. The pond restoration project which the partnership is developing for 2010-2013 will be contributing to the restoration of Great crested newt habitat and those working at sites identified with Great crested newts will be given training for monitoring and surveying.

Mammals

Of the 18 species of mammal which appear on the UK priority species list, 4 species do not occur in the county and 7 are bat species. Cambridgeshire and Peterborough have a total of 12 bat species, some of which are included on the national priority list. As has been suggested in previous partnership discussions about Species Action Plans, a generic Action Plan for bats could be a beneficial approach. Across East Anglia, there are several active bat conservation groups and ecological consultants working to protect bat species from decline through roost site provision and general surveying. Within Fenland district the IDB BAPs have identified project work to go ahead for 70 bat boxes provided across the different internal drainage boards, similar roost site provision could be undertaken within identified sites county wide. Otters and Water voles have been the focus of existing projects and work is ongoing. Monitoring and surveying for distribution and density are important actions for species such as Pole cat, Brown hare, Harvest mouse, Common dormouse and Hedgehogs. Projects could use public awareness campaigns for recording sightings and involve the BRC. All these species would benefit from identification of important sites for species populations and from positive habitat management and restoration. The Brown hare and Common dormouse action plans would benefit from being brought into the relevant HAPs and projects which cover habitats of importance for these species should be aware of these species needs.

Fish

There are 15 species of fish, excluding purely marine species, which are considered priority species in the UK. Of these there are 5 species which are important within the county. There has been much work within the partnership tackling river restoration and management and as such the Brown trout has had good coverage from existing work. The importance of eels in Ely could be drawn upon and would be good for a strategic project and link in with the Environment Agency and Middle Level projects, as has been previously expressed. Cambridgeshire holds an important percentage of the global population of Spined Loach in the Nene and Ouse Washes and therefore this species presents an important target for specific action. River lamprey and European smelt have an unknown distribution within the county, so perhaps general monitoring and surveying to identify important sites could be undertaken and then a habitat level focus which was aware of these species needs would be beneficial. Projects which this research has identified as having a strong potential for future action would be to promote the conservation of fish species through identifying forums which engage the relevant stakeholders, such as the Environment Agency and fisheries and ensuring biodiversity values and conservation options are being represented. There is potential for fish conservation which encompasses many species and which would be of interest and value to many of the stakeholders. The Environment Agency has extensive records of fish species diversity, presence and abundance and collating this, with a view for conservation, could be really beneficial.

Birds

There are 59 species of birds on the UK species priority list of which 20 have been defined as important at the local level. Noticeably within the partnership there has been limited coverage of bird species. This has been due to the work of the RSPB which has led to good financial support, a strong campaign base and great public awareness for conservation of local bird species. Knowledge of bird distribution, ecology and important bird sites within the county is extensive, and large amounts of research, monitoring and surveying occur of many sites and species. There are 4 RSPB nature reserves in the county which provide coverage of important areas for wetland bird species and for migrating and wintering species. The RSPB also run several species specific conservation projects including research and conservation of the Stone Curlew, Sky Lark, Bittern, Corncrake and Lapwing. There is much work by the RSPB with Natural England to develop Environmental Stewardship grants for the management of arable land which has seen the most drastic decline in associated bird species relating to the intensification of agriculture. To increase communications with a

regional RSPB contact who was involved in the management of the 4 RSPB nature reserves could be beneficial for the partnership. It would enable updates of current species work so the partners are aware of the fulfilment of BAP species and could advise on positive land management for bird species and highlight projects which had bird conservation potential.

Partnership Action

Identifying active species interest groups and individuals across the county, tightening communications with these groups and enabling support mechanisms for these groups would be an extremely beneficial activity. Pooling local knowledge and interest and providing partnership support and funding advice would enable important site identification and increase public awareness and involvement. This action could run in conjunction with the Biological Records Centre (BRC) and would increase the use of data sharing and the informal public monitoring system. Engaging local interest groups in surveying and monitoring would also reduce the support required from the partnership. It is important to maximise and connect action that is already occurring as this will increase coverage and help maximise limited resources.

Increasing awareness and carrying out public campaigns for informal species monitoring with the BRC would be a valuable activity and would increase knowledge of species distribution and potential sites of importance. It would be beneficial for the partnership to support areas which receive less focus at the local scale and promoting interest in species which receive less attention, such as reptiles and amphibians, to potentially strengthen existing interest groups or create new ones.

Developing a more strategic approach for partnership action would enable the partnership to maximise conservation outcomes from limited funding opportunities and to tackle important conservation priorities. Identifying priority conservation areas and directing partnership support at developing and managing projects which encompassed these sites would facilitate a high level of coverage of the important BAPs and would ensure the counties biodiversity is conserved despite the current economic pressures.