



# wildlife and habitats

## Conservation efforts appear encouraging though biodiversity remains under pressure

**Hertfordshire's quality of life depends upon its wildlife and habitats for the leisure and environmental resources they provide. Understanding precisely how they are affected by the pressures placed upon them, however, is difficult. Change is not easily measured and relies heavily upon volunteers and good monitoring programmes.**

The county's biodiversity is continually threatened by new development, intensive agriculture and climate change. So called 'threats' can also create opportunities and we have seen certain species appearing to thrive in recent years. Planning agreements can secure important site management projects for species, e.g. when the Baldock bypass was built, new road verges were seeded with wildflowers. Agri-environment schemes can also support existing or new farm habitats. Together with continued site protection, these may help wildlife adapt to changing environments. The need to remain vigilant is important and continued monitoring remains an essential part of biodiversity conservation.

### Indicator WH1 - Water Voles<sup>1</sup>

During 2007 the Hertfordshire Water Vole Project carried out surveys along 20 kms of river and wetland habitats. More than 33% of the sites surveyed showed signs of water voles with rivers Mimram, Purwell, Chess and Lea Valley remaining habitat strongholds. Compared with the results of 2004 and 2006, when surveys were carried out along 50 km stretches, noticeable increases in range were seen in 2007. Although the future appears to be encouraging, Mink, a species against which the Water Vole is defenceless, continued to be recorded on most rivers this year. Where Mink control schemes have been set up, a marked decline is evident.

### Indicator WH2 - Birds

The British Trust for Ornithology (BTO) conducts a Breeding Birds Survey (BBS) which provides bird population data. In 2004 sixty-three 1km BBS squares were surveyed in Hertfordshire and four key indicator species were chosen to reflect the quality of particular habitats or land-use types in the county. The following data is derived from the BTO's 2006 BBS report and Hertfordshire Bird Club's<sup>2</sup> 2004 Hertfordshire Bird Report.

### 1. Wetlands Indicator - Grey Heron

The heron breeds in colonies and is on the National Birds of Conservation Concern 'Green List'. Their nests are counted annually, with numbers rising in England by 8% but falling regionally by 7% (1994-2006). In 2004 there were 113 occupied nests recorded in the county.

**Grey Heron numbers at most notable sites in Hertfordshire with changes shown between 2005 and 2006<sup>2</sup>**

Amwell Gravel Pit	24	-1	Brocket Park	30	+2
Frogmore Gravel Pit	2	-4	Stocker's Lake	25	+13
Wilstone Reservoir	20	-7	Verulamium Park	12	-3

### 2. Farmland Indicator - Skylark

Nationally skylarks are on the 'Red List' of Birds of Conservation Concern and Biodiversity Action Plan (BAP). Numbers fell in England by 19% and by 22% regionally (1994-2006), however, in Hertfordshire numbers rose by 10% (2003-2004).

### 3. Woodlands & Mixed Farmland Indicator - Song Thrush

A national BAP species and on the National Red List of Birds of Conservation, even though it is widespread. Numbers rose in England by 19% but fell 22% regionally and 6% in the county (1994-2006).



House Sparrows declined 14% in the UK and 27% regionally 1994-2006. © Clare Gray, Herts & Middx Wildlife Trust Image Library



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## 4. Urban Environment Indicator - House sparrow

A national 'Red List' species, the population of this bird continues to decline in England. Numbers fell by 14% in 1994-2006; a greater decline than the 9% reported last year (1994-2005). Numbers also continued to decline regionally; by 27% between 1994- 2006 compared to 24% across 1994-2005. In Hertfordshire house sparrows were recorded in less than 40 of the 63 1km BBS squares. As a result, the sample was too small to report a population change figure. Whilst this may be a reflection of where the surveys were conducted, the reduced records do show the population continued to fall in the county.

### Indicator WH3 – Wildlife Sites<sup>3</sup>

Wildlife Sites (also known as Local Wildlife Sites) are the most important places for wildlife outside legally protected land like Sites of Special Scientific Interest (SSSIs). They are essential to biodiversity conservation and together with statutory sites and nature reserves, form a major part of the county's natural assets. They also play a vital role within the county's Biodiversity Action Plan (BAP)<sup>7</sup>. Their identification assists siteowners, planners and conservation bodies to make informed decisions to protect and maintain the county's biodiversity. By November 2007 there were 1,992 wildlife sites covering about 10% of the county. In 2006-7 over 240 planning applications, directly or indirectly affecting wildlife sites, were assessed or responded to by the Wildlife Sites Partnership. Volunteer surveyors carried out botanical surveys to assess 32 sites.

Indicator WH3 – Wildlife Sites					
Council	Number of Wildlife Sites	Number change	Total Notified	% notified	% change
BBC	93	+2	66	71	-2
DBC	246	N/A	209	85	-1
EHDC	609	N/A	450	74	---
HBC	131	+3	102	78	-2
NHDC	348	+5	277	80	---
SACD	197	N/A	147	75	+1
SBC	41	N/A	36	88	+13
TRDC	151	+1	110	73	-1
WBC	33	N/A	22	67	+2
WHDC	206	+1	168	82	+1
<b>Total</b>	<b>1992</b>	<b>+8</b>	<b>1587</b>	<b>80</b>	<b>+11</b>

Source: Herts Biological Records Centre & HMWT<sup>3</sup> November 2007  
 \* the total number of Wildlife Sites is less than the sum of individual districts as some sites are located across district boundaries

### Indicator WH4 – Bats

No new bat data was available.

### Indicator WH5 – Butterflies<sup>4</sup>

2007 was a poor year generally for monitoring butterflies. Primarily this was due to an unusually hot April, followed by prolonged heavy rain and frosts in May, which caused early spring casualties. As this report was compiled results were still being collated but summaries are given below. Results so far appear to reflect the summer weather conditions.

#### Green Hairstreak

Few reports were made of this species in 2007, although transects are known to under-record this species.

#### White Admiral

2007 was a very bad year for what is now a UK priority species and few were recorded.

#### Common Blue

This species also seems to have had a bad year.



Common Blues mating near Royston  
 © John Murray Herts Butterfly Conservation



The Small Copper - 2007 results for this species are not yet clear.  
© John Murray Herts Butterfly Conservation

## Dingy and Grizzled Skippers

These butterflies are key species in the county and now listed as a UK BAP priority. They were particularly affected by the early, hot April weather. Although numbers appear to be stable, it isn't known yet how the weather that followed affected breeding.

## Browns

Most of these appeared to have had a good year.

## Silver-washed Fritillary

These were seen at several sites for a second year.

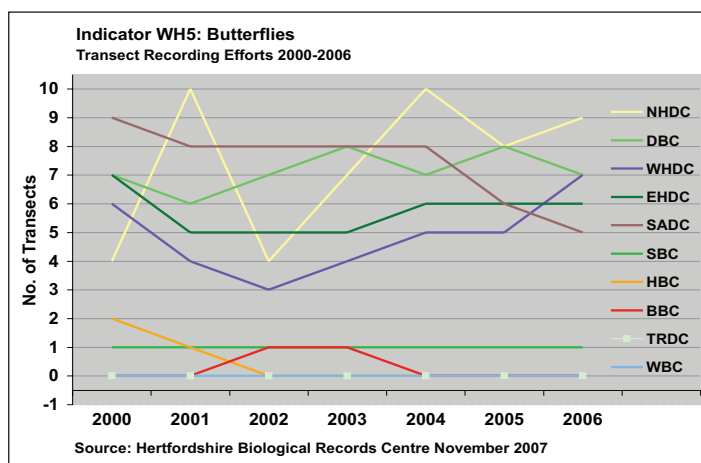
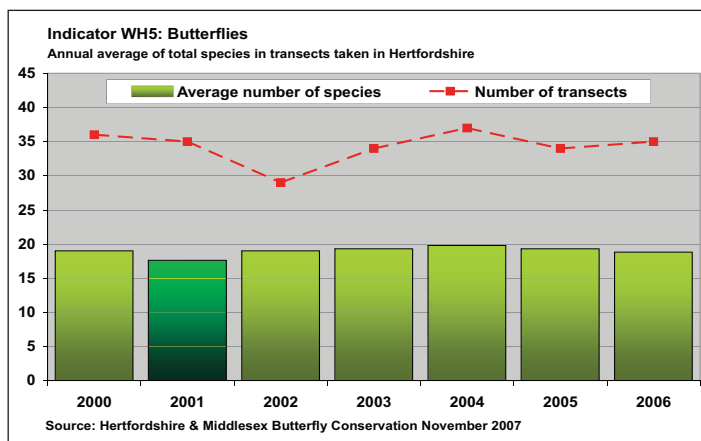
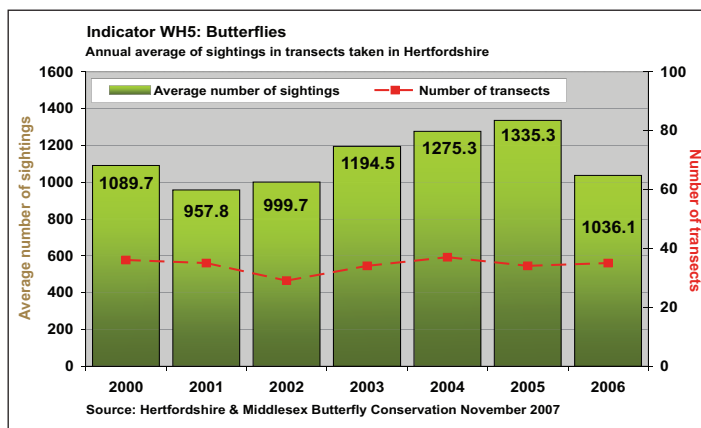
## Dark Green Fritillary

These were again sighted again at Aldbury Nowers.

## Long Term Change

Average figures give the best guide to change due to the varying number of transects<sup>5</sup> taken. Long term figures show that the number of butterflies and species remained relatively stable despite natural fluctuations. However, they do not reflect the fate of individual species, especially rarer ones. Despite a good number of transects being recorded, some

areas lacked data, especially Broxbourne, Watford, Three Rivers and Hertsmere. Given that voluntary commitment is essential in producing this data, all efforts are always highly commended.



## Indicator WH6 Condition of SSSIs<sup>6</sup>

Sites of Special Scientific Interest (SSSIs) are nationally important biologically and geologically. Their relative condition is a government indicator. The county's monitoring period runs from 1998 to 2007.



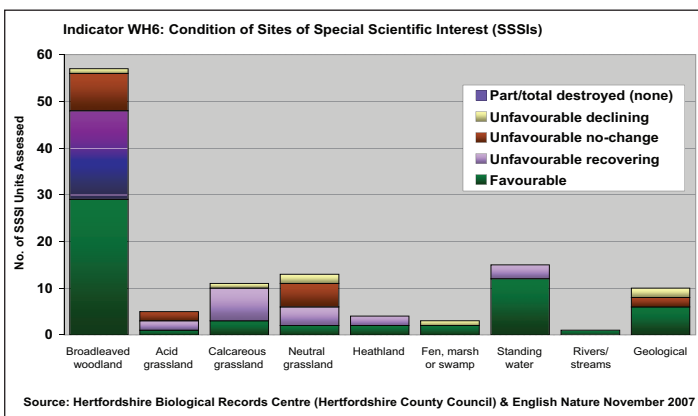
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## Indicator WH6: SSSIs in a favourable condition\*

2004	2005	2006	2007
68%	66%	70%	87%

Source: Hertfordshire Biological Records November 2007

October 2007 summary results show a cumulative improvement in county SSSIs since the year 2000. 100% of open water units were classified as 'favourable', as were 70% of grasslands/heaths and fens, 84% of woodlands and 60% of geological sites. The rest of the habitats were classified 'unfavourable'. Several grassland sites continue to suffer from inappropriate grazing with the high number of deer continuing to be a problem in woodlands. These issues affect the management of the wider countryside but it is hoped that development of new agri-environment schemes will soon have an impact.



## Recent legislation and guidance

### Planning Policy Statement 9: Biodiversity & Geological Conservation

This policy was produced by the Government in August 2005 and detailed guidance on its implementation was released in March 2006.

### Natural Environment & Rural Communities Act 2006

This Act, which came into force on 1 October 2006, requires all public bodies to have regard for biodiversity conservation in exercising their functions. Detailed guidance on its delivery was produced by DEFRA<sup>8</sup> in May 2007 and is available at [www.defra.gov.uk/wildlife-countryside/biodiversity/index.htm](http://www.defra.gov.uk/wildlife-countryside/biodiversity/index.htm).

DEFRA has also produced a revised Hedgerow Survey Handbook, to help support the UK Biodiversity Action Plan for Hedgerows in March 2007.

## Hertfordshire Biodiversity Action Plan Update<sup>7</sup>

- **Bittern:** Much work was undertaken to improve habitats for these birds in the county including reedbed lowering, reed planting and tree removal. 4 Bitterns were recorded during winter 2006/07.
- **Grizzled Skipper:** There were 95 recorded sightings of this butterfly; Waterford Pit and Tring Park being the best sites. The Woodland Trust continued work at Tring Park with a hectare of scrub cleared from the escarpment. Countryside Management Service volunteers carried out further clearance in winter 2007/08. Herts & Middlesex Wildlife Trust provided advice and oversaw habitat management at Aldbury Nowers. Guided walks were led at Tring Park, Aldbury Nowers and Waterford Pit.
- **Tree Sparrow:** 2007 was a hard year for this bird. Breeding began at least two weeks early with some good clutches and fledging results; but late May-June's cold and wet weather changed all this. There were second broods but breeding was cut short mid July - rather than continuing into August.
- **Stone Curlew:** Ground-nesting bird plots were successfully created in North Hertfordshire through the Government's agri-environment scheme that runs until 2016.

## National Biodiversity Action Plan Update<sup>7</sup>

- The first full review of the UK BAP targets, since the national species and habitat action plans were prepared, was published in December 2006.
- Following the December review, an updated list was published in June 2007. This list now contains almost double the original number of species with 1149 species and 65 habitats named. Traditional orchards were amongst the priority habitats newly included together with the Pasqueflower and Grizzled Skipper becoming priority species.

## Acknowledgements & Footnotes

This report was collated by Hertfordshire Biological Records Centre (HBRC) with information provided by the following bodies

- 1 Herts & Middx Wildlife Trust Water Vole Officer (Alison Washbrook).
- 2 Herts Bird Club and HBRC (Graham Goodall)
- 3 HMWT Wildlife Sites Officer (Jane Clark) and HBRC (Anita Parry) The Hertfordshire Wildlife Sites Partnership is co-ordinated by the Wildlife Sites Officer and consists of conservation and farming organisations. Visit their website via our report website or call the Wildlife Site Officer at Herts & Middx Wildlife Trust on 01727 858901
- 4 Herts & Middx Butterfly Conservation (Liz Goodyear)
- 5 Transect: an area of land used as a sample.
- 6 English Nature and HBRC (Martin Hicks)
- 7 Hertfordshire BAP officer - Catherine Wyatt
- 8 Department for Environment, Food & Rural Affairs

Links to the above organisations' websites accessible on report website

\*The 'favourable' definition includes 'unfavourable recovering by area'.