

WILDLIFE AND HABITATS

Introduction

Monitoring our wildlife and habitats can be used to detect trends in the environmental 'health' of our county. Biodiversity (the variety of life on earth) depends on a delicately balanced environment. Our own health and quality of life is closely linked with the well-being of the countryside and wildlife around us. In Hertfordshire, we are helping to maintain this variety through the Biodiversity Action Plan (BAP) which details targets and actions for the conservation of key species and habitats. The Water Vole and Great Crested Newt are both species included in the BAP as are the habitats- woodlands, heathlands and wetlands.

Indicator 1: Population of Water Voles

The water vole has suffered long-term decline in Britain since at least 1900. Water vole habitats are now protected following amendments made in 1998 to the Wildlife & Countryside Act 1981. A register of 100 sites to be monitored on a regular basis has been established by Hertfordshire Biological Records Centre (HBRC); the aim being to survey 25 stretches of river bank for water voles each year with a major re-survey of all sites in the year 2000. During the year 1997/98, evidence of water voles was found at 24 of the 25 sites investigated; two stretches of river previously recorded as negative are now positive. Continuing water loss, in many of Hertfordshire's rivers has seriously affected water voles; in particular along stretches of the Mimram and Gade. One previously positive area along the River Gade no longer supports water voles.

Indicator 2: Area of Heathland - not updated

The Hertfordshire Habitat Survey reports a heathland loss of 97.2% since 1940 with only 21 hectares surviving in 1997.

Indicator 3: Area of Ancient Woodland - not updated

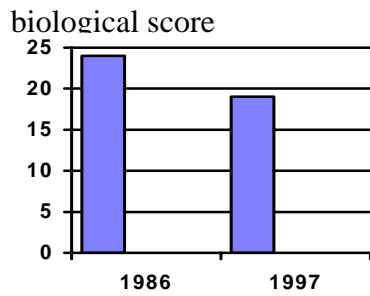
The extent of ancient woodland (i.e. woodland over 400 years old) in 1997 was estimated to be 5414 hectares of which 4038 hectares is still semi-natural (composed of native stands of trees). This is 2.5% of the county area.

Special Indicator A: Pond Quality (a wetland habitat example)

A map study in 1986 revealed that in 100 years the total number of ponds in the county almost halved. In the same year a field study of 730 ponds showed that 80% were in poor condition. 59 of these ponds were re-surveyed in 1997.

The results showed a substantial loss of water with a corresponding reduction in diversity of aquatic flora and fauna. 17 ponds were completely dry representing 29% of the ponds re-surveyed. When the same pond quality scoring system used in 1986 was applied to the remaining 42 ponds, the biological quality decreased from a mean score of 24 in 1986 to 19 in 1997; this amounted to a 21% decline. The quality of the sample of ponds has clearly declined during the last 10 years and may reflect a similar decline throughout the county.

Pond Biological Score (42 ponds)

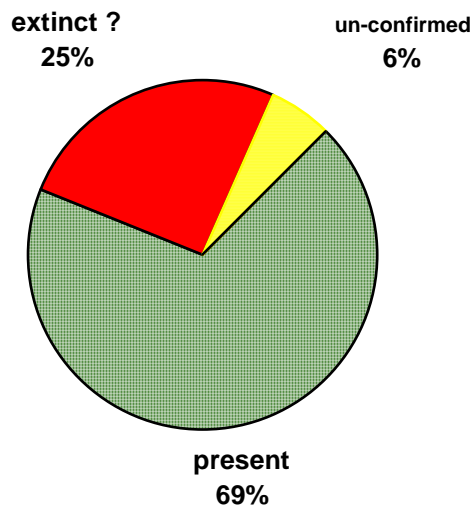


During the 1997 survey over one quarter of ponds were completely dry.

Special Indicator B: Population of Great Crested Newts

A re-survey of all known historical Great Crested Newt breeding sites (67 areas) was undertaken by the Hertfordshire Amphibian & Reptile Group resulting in a total of 46 populations being confirmed as still present in the county. The results showed a minimum level of site extinction of approximately 25% over the past twenty years, with most of the losses caused by the introduction of fish or lack of pond management. In addition the population status at most of the remaining sites is not high with only 5 populations achieving a night time torch count of over 100 animals. Six previously unrecorded populations were also discovered during the survey.

Summary of survey results by population of Great Crested Newts



The 25% site extinction over 20 years is an extinction rate of 2.2%/annum.

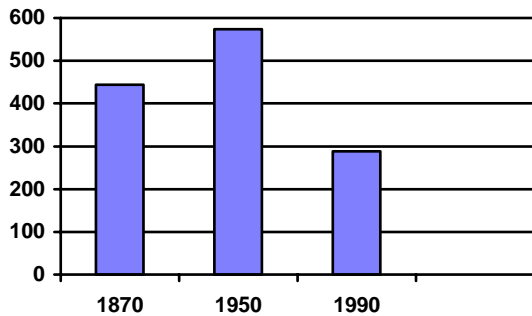
Special Indicator C: Orchards

A pilot study into the historic changes and current status of orchards in the Borough of Dacorum was undertaken as part of the Hertfordshire Orchards Initiative. This showed that discrete orchard sites increased from 444 in the 1870s to 574 in the 1950s; but that by 1990 the number had declined to 288. Furthermore the quality of surviving sites appeared rather poor with only around 25 sites regarded as being of high potential value. This clearly

represents an overall decline in both extent and quality of the once widespread and common feature of our countryside. Many former orchards now survive as a few apple trees in back gardens. It is hoped to extend this survey to cover the rest of Hertfordshire, as well as target surviving sites for ecological surveys.

Number of Orchards in the Borough of Dacorum

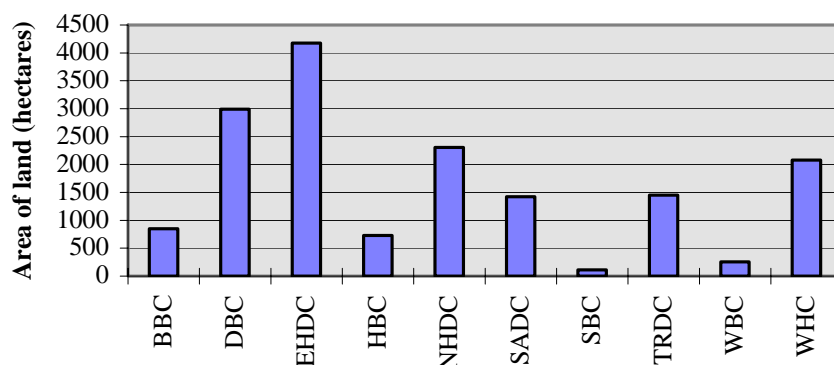
orchards



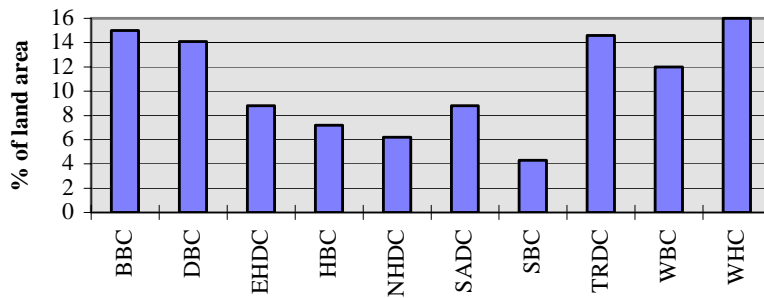
Special Indicator D: Wildlife Sites in Hertfordshire

Currently only a small proportion of the county’s wildlife resource is protected by statutory legislation, whilst these cover the most important ecological sites in the county, they are insufficient on their own to maintain the full diversity of habitats and species surviving in Hertfordshire today. Non-statutory ecology alert sites have been mapped by HBRC since the early 1990s. The most important of these are known as Wildlife Sites and are regarded as being of critical natural capital. The number and extent of Wildlife Sites is reported on below.

Land meeting Wildlife Site Criteria by District/Borough



**Proportion of Land in District/Borough meeting
Wildlife Site Criteria**



10% of the total land area of Hertfordshire meets wildlife site criteria.

The Wildlife Sites have been identified from the current ecological knowledge of the county. However, it should be remembered that the resource of *wildlife sites* is dynamic; their survival is dependant upon the continuation of habitat and land management practices. Changes in Wildlife Sites need to be monitored on a regular basis.

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