

**Appendix 16: Jeskyns Farm, Cobham, Ecological Survey Report****JESKYNS FARM, COBHAM.  
ECOLOGICAL SURVEY****INTRODUCTION**

Kent Wildlife Trust was contracted by Forestry Commission (England) to undertake an ecological survey and desktop study of Jeskyns Farm in Cobham (approximate grid reference to centre of site TQ666693).

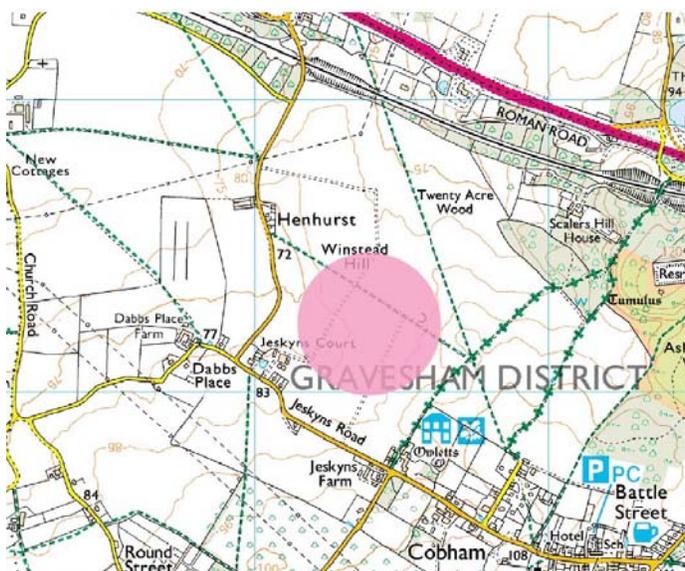
The desktop study and survey work were required in connection with Forestry Commission's proposals to create a Community Greenspace within Jeskyns Farm.

The aims of the survey were to:

- Determine the likely ecological interest of the site.
- Provide outline management recommendations aimed at retaining and enhancing existing semi-natural habitats and species found on site.
- Provide recommendations, if appropriate, for additional specialist survey work.

A map showing the location of the site is given in Figure 1 below.

A map showing the site boundaries are given in Figure 2 overleaf.



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Figure 1: Jeskyns Farm, Cobham. Map showing general location of survey area (centre of site shown by pink circle).

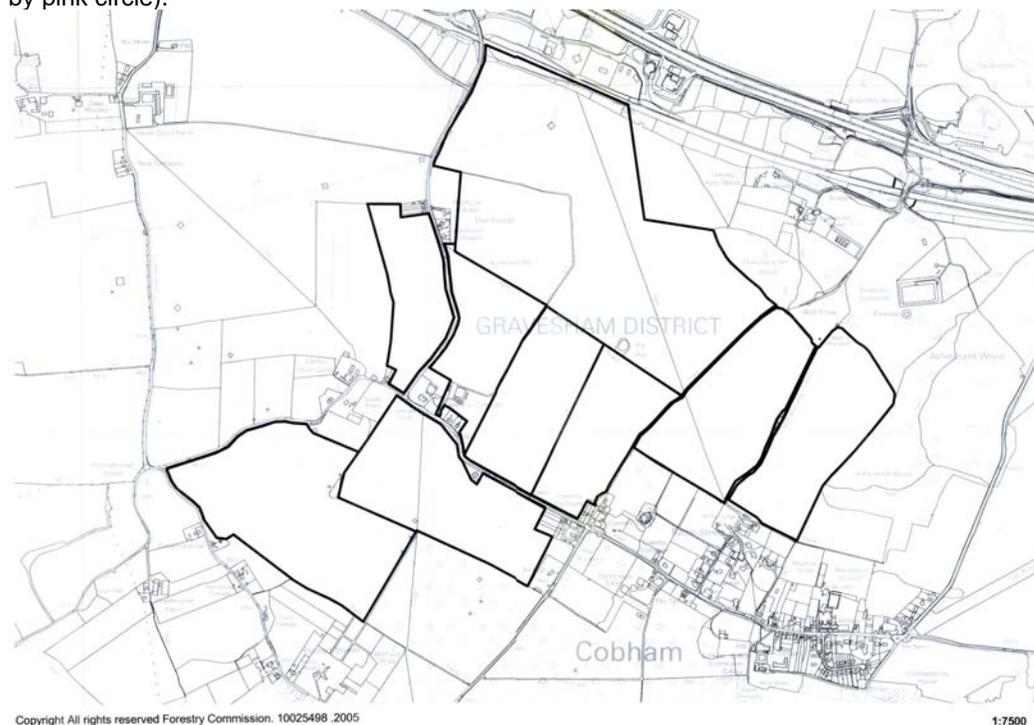


Figure 2: Jeskyns Farm, Cobham. Map showing extent of survey area (boundaries outlined in black).

## THE SITE

The site is located approximately 1 km south – east of Gravesend and 0.5 kms north – west of Cobham village, south of the A2 Watling Street road at a mean elevation of approximately 80 m OD.

The site was surrounded by open countryside throughout, but with part of the A2 forming the northern boundary, as well as Ashenbank Wood Woodland Trust reserve to the north – east. Cobham village forms the south – eastern boundary whilst the remainder was open fields, largely devoted to arable cultivation. There were localised hedges, patches of scrub and grass verges, but the dominance of arable agriculture means that the site was largely fairly devoid of ecological interest, and lacked features such as old hedges, grassland and significant areas of scrub.

The land sloped gently down from the north, and thereafter had only local variations in contour. There were several public footpaths and two byways which cross the site, the latter being located between Ashenbank Wood and Cobham village, with one being particularly deeply incised into the landscape as a sunken lane.

The soil consisted largely of chalk rendzina with plateau drift mixed with large areas of light sands with rounded flints of unknown origin.

## **THE SURVEY**

The ecological survey comprised two elements: a desktop study and a site survey.

Both elements have been described separately below:

### **Desktop Study**

A number of sources were consulted for records of statutory and non-statutory wildlife designations and details of protected species.

These comprised:

- Kent Wildlife Trust site files (information on statutory and non-statutory conservation designations, the Kent County Council Integrated Habitat Classification Survey and biological records).
- The website 'Multi-agency geographic information for the countryside' ([www.magic.gov.uk](http://www.magic.gov.uk)). A one-stop shop for rural and countryside information, bringing together definitive rural designation boundaries and information about rural land-based schemes.
- West Kent Badger Group.
- Kent Bat Group.
- Kent Mammal Group.
- Kent and Medway Biological Records Centre.

The desktop survey was undertaken by Anne Waite, Conservation Officer at Kent Wildlife Trust

## Site Survey

All parts of the site were visited that could be safely and easily accessed.

A single visit totalling approximately 11 hours' duration was made to the site on Tuesday 30<sup>th</sup> August 2005. The ecological survey was undertaken by Martin Newcombe, an experienced ecological consultant.

During the course of this visit, the following surveys were carried out:

A Phase 1 habitat survey was carried out using the methods described by Nature Conservancy Council (1990).

The plant and animal species of the site were listed by using the variety of inventory methods described by Sutherland (2000) and Slingsby and Cook (1986). Particular attention was paid to identifying any notable plant communities or individual plant species.

A search was also made for any species that might be specifically protected for conservation purposes by wildlife legislation<sup>1</sup> such as badgers (*Meles meles*) and dormouse (*Muscardinus avellanarius*) and certain rare plants, using appropriate established techniques. Where applicable (or where time did not allow for the appropriate techniques to be used), habitat was also assessed with respect to its suitability for holding such rare species.

A search was also made for species that might be included within the short and middle lists of the national Biodiversity Action Plans (BAP) (Biodiversity Steering Group, 1995) and the Kent Red Data Book (Waite, 2000).

A search was also made for notable habitats which might have general importance for wildlife.

## RESULTS

### Desktop Study

Statutory and Non-Statutory Conservation Designations

There are a number of statutory and non-statutory conservation designations that may be applied to a site. They have been listed below:

- Special Areas of Conservation

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<sup>1</sup> Mostly, this included species listed by Christopher Betts Environmental Biology (2000) as being protected by the Wildlife and Countryside Act 1981, as amended.

- Special Protection Areas
- Ramsar Sites
- Sites of Special Scientific Interest
- National Nature Reserves
- Sites of Nature Conservation Interest
- Local Nature Reserves
- Roadside Nature Reserves

Current information obtained from Kent Wildlife Trust files and the Multi-agency geographic information for the countryside indicates that there are no statutory or non-statutory conservation designations directly affecting the Jeskyns Farm site.

However, Ashenbank Wood, which abuts the northeastern boundary of Jeskyns Farm has been designated as a Site of Special Scientific Interest (part of Shorne and Ashenbank Woods).

### **Protected Species**

Badgers. Badgers *Meles meles* are protected under the Protection of Badgers Act 1992, which consolidated and added to previous legislation. It is illegal to willfully kill, injure or maim a badger, and badger setts are protected from interference. Setts are often large and may extend over a wide area both above and below ground, which makes it necessary to consider them during any development schemes on sites where badgers occur.

The West Kent Badger Group has no records of badger from within the Jeskyns Farm site. They do however have many records from around the Cobham area, indicative of a high level of activity, presumably arising from Ashenbank Wood.

The Kent Mammal Group and the Kent & Medway Biological Records Centre also have some records of badger from the locality, although again not from Jeskyns Farm itself.

Badger records have been included within Appendix 3.

A copy of the Kent & Medway Biological Records Centre datasearch is contained within a separate document held by the Forestry Commission (KMBRC, 2005).

Bats. All British bats and their roosts are protected under Schedule 5 of the 1981 Wildlife & Countryside Act. They are also protected under Schedule 2 of the Habitats Regulations, 1994. This makes it illegal to kill, injure, capture or disturb bats or obstruct access to, damage or destroy bat roosts. Under the law, a roost is any structure or place used for shelter or protection. Because bats tend to re-use the same roosts, the roost is protected whether the bats are present at the time or not.

The UK is a signatory to the Agreement on the Conservation of Bats in Europe, set up under the Bonn Convention. The fundamental obligations of Article 3 of this Agreement require the protection of all bats and their habitats, including the identification and protection from damage or disturbance of important feeding areas for bats. Where development is involved, a licence is required from the Department of the Environment, Farming and Rural Affairs if the work is likely to affect a bat roost.

Kent Bat Group has no records of bat from within the Jeskyns Farm site, although there are a number of records from Cobham and from Ashenbank Wood.

In total the Kent Bat Group has records of nine species of bat (45kHz pipistrelle *Pipistrellus pipistrellus*, 55kHz pipistrelle *Pipistrellus pygmaeus*, brown long-eared *Plecotus auritus*, serotine *Eptesicus serotinus*, noctule *Nycatalus noctula*, Leisler's *Nyctalus leisleri*, Natterer's *Myotis nattereri*, Daubenton's *Myotis daubentonii* and Whiskered *Myotis mysticanus*) within 5km of the site. A copy of the detailed data search has been enclosed within Appendix 3.

The Kent & Medway Biological Records Centre also two bat records (serotine & 55 khz pipistrelle) from within their search area(the site itself and all surrounding 1km squares), but not from Jeskyns Farm itself. A copy of the Kent & Medway Biological Records Centre datasearch is contained within a separate document held by the Forestry Commission (KMBRC, 2005).

Mammals. Kent Mammal Group has no records of mammals from within the Jeskyns Farm site. However, there are records of badger and dormouse from within 1km of the site, and fox, grey squirrel, hedgehog, mole, rabbit, brown rat, bank vole, common shrew, wood mouse, and yellow-necked mouse within 1.5km of the site.

The Kent & Medway Biological Records Centre also has records of hedgehog, common shrew, pygmy shrew, water shrew, dormouse and badger from within the Jeskyns Farm search area.

The dormouse is listed on Schedules 5 & 6 of the Wildlife and Countryside Act and Schedule 4 of the Conservation (Natural Habitats &c.) Regulations 1994. Taken together, the Act and Regulations make it illegal to:

- Intentionally or deliberately kill, injure or capture dormice.
- Deliberately disturb dormice (whether in a nest or not).
- Damage or destroy dormouse breeding sites or resting places.
- Possess or transport a dormouse or any part of a dormouse, unless acquired legally.
- Sell, barter or exchange dormice, or parts of dormice.

The hedgehog and common shrew are listed on Schedule 6 of the 1981 Wildlife and Countryside Act. This schedule covers animals which may not be killed or taken by certain methods (traps and nets, poisons, automatic weapons, electrical devices, smokes/gases and various others). Even humane trapping for research requires a licence (Betts, 2001).

A copy of the Kent Mammal Group data search has been enclosed within Appendix 3.

A copy of the Kent & Medway Biological Records Centre datasearch is contained within a separate document held by the Forestry Commission (KMBRC, 2005).

### **Birds.**

The Kent & Medway Biological Records Centre has records for in the region of 100 bird species within the search area, although there appear to be no records from within the Jeskyns Farm site itself.

Twelve of these species – leach's storm-petrel *Oceanodroma leucorhoa*, red kite *Milvus milvus*, hobby *Falco subbuteo*, quail *Coturnix coturnix*, whimbrel *Numenius phaeopus*, barn owl *Tyto alba*, hoopoe *Upapa epops*, wryneck *Jynx torquilla*, fieldfare *Turdus pilaris*, ciril bunting *Emberiza cirilus*, brambling *Fringilla montifringilla*, and golden oriole *Oriolus oriolus* – are protected under Schedule 1 of the Wildlife and Countryside Act, 1981.

A copy of the database search results have been enclosed as a separate document (KMBRC, 2005).

**Amphibians and Reptiles.**

The great crested newt *Triturus cristatus* is protected under all elements of Section 9 of the Wildlife and Countryside Act 1981. It is also protected under parts 1 and 2 of Regulation 39 of the Habitats Regulations 1994 and the Countryside and Rights of Way Act 2000. This legislation taken together prohibits the following:

- Deliberately, intentionally or recklessly, injuring, killing and capturing.
- Deliberately, intentionally or recklessly disturbing.
- Deliberately, intentionally or recklessly taking or destroying eggs.
- Deliberately, intentionally or recklessly destroying a breeding site or resting place or damaging or obstructing a resting place used for shelter or protection.
- Keeping, transporting, selling or exchanging; offering for sale or advertising.

Consequently not only are the animals themselves protected, but so is their habitat, and activities that damage or impede the use of this habitat are prohibited.

The viviparous lizard *Lacerta vivipara*, grass snake *Natrix natrix*, adder *Viper berus* and slow-worm *Anguis fragilis* have partial protection against killing, injuring and sale etc only under the 1981 Wildlife and Countryside Act.

Smooth newt *Triturus vulgaris*, palmate newt *Triturus helveticus*, common frog *Rana temporaria* and common toad *Bufo bufo* have partial protection under the 1981 Wildlife and Countryside Act against sale only.

The Kent and Medway Biological Records Centre has no records of reptiles or amphibians from within the Jeskyns Farm site. There is a record of palmate newt from Ashenbank Wood, adjacent to the northeastern boundary. The other records come variously from Shorne Wood Country Park, Cobham and Scalers Hill Pond. A copy of the Biological Records Centre data search has been enclosed as a separate document (KMBRC, 2005).

**Habitats**

Reference was made to the Integrated Habitat Classification Survey of Kent (IHCS) (KCC 2003). This survey updated the detailed Phase 1 Habitat Survey of Kent, which was undertaken in the early 1990s. The IHCS used aerial photographs, supplemented by field visits to determine the type and extent of the main habitats present within the county.

The IHCS indicated that the Jeskyns Farm site comprised: arable land, neutral grassland, and a small pond. A copy of the habitat map has been included within the separate document produced by the Kent and Medway Biological Records Centre (2005).

**Site Survey**

The results of the Phase 1 habitat survey are shown in Figure 3.

A map showing the location of notable features (excluding badger) has been enclosed within Figure 4 and further details are provided in Appendix 2.

A total of 183 species of plants and animals were recorded in the site and are detailed in Appendix 1. Of these, a total of 111 species were vascular plants: garden plants were not recorded unless they appeared to be fully naturalised and / or escaping.

A total of 26 bird species were recorded in the site. No formal breeding bird survey was carried out but evidence of nesting or other possible breeding activity is indicated in Appendix 1.

The following signs and / or potential for the presence of any species which are specifically protected under wildlife legislation were found. These included:

- The presence of several badger setts throughout the site. Further information on the location of the setts is given in Appendix 3.
- Slight potential for the presence of roosting bats was noted in a group of oaks and in an old sweet chestnut tree, all of which were located in the open arable fields. In addition, one bat species was found foraging on site. The details of these trees are shown in Figure 4 and are described in more detail in Appendix 2.
- A single viviparous lizard was seen in wood–edge scrub in the north - western part of the site. The habitat at that point was thought to be particularly suitable for these animals. Two other areas of potential reptile habitat were also identified and are shown in Figure 4 and described in more detail in Appendix 2.
- Potential habitat for dormice was found in the eastern end of the site, in the wood–edge scrub adjacent to Ashenbank Wood and in the easternmost of the two tracks that crossed the site at this point. The details are shown in Figure 4 and Appendix 2.

- The presence of a range of other protected species was considered and rejected because of the absence of appropriate evidence or habitat parameters within or close to the site.

The following priority-list BAP and Kent RDB species were found on site:

- Cornflower, a priority-list BAP plant.
- Corn cockle, a Kent RDB species.
- Linnet, a BAP priority-list species, which was feeding on site.
- Spotted flycatcher, a BAP priority-list species, which bred on site.
- House sparrow, a Kent RDB species.
- Turtle dove, a BAP priority-list species, which flew over the site.
- Brown hare, a BAP priority-list species.
- 55 kHz pipistrelle bat, a BAP priority-list species.

Some areas of general habitat which might have potential for wildlife were found and are shown in Figure 4.

## DISCUSSION

The total number of species recorded within Jeskyns Farm is small by comparison with the potential number of species that might be recorded given more time and additional visits in which to undertake the work, possibly over several years. However, short surveys such as this are good at giving a 'snapshot' of the ecological value of a given site, even though, at this site, the survey was late in the season and therefore less likely to pick up summer migrants and ephemeral plants etc. Rarities are sometimes missed during such surveys (*Martin Newcombe, personal observation*) but these may also be missed even after many years' detailed study of a particular site. An experienced naturalist should be able to gain some indication of the ecological value of a site just by spending a small amount of time in it. The number of species recorded on a site is mostly a function of the amount of time and effort put into recording (Rich 1998). Therefore, a longer species list would be expected with time, but the numbers of new species recorded during each visit would, logic suggests, decrease with time. In the light of this situation, therefore, the numbers of species of all groups that have been recorded at this site is adequate for the purpose of initially assessing the biological diversity of the site.

The plant list was, overall, fairly poor in terms of both numbers of species and the actual range of species that were present, but was possibly restricted as a result of the fact that much of the survey area was arable land. Nevertheless, much of the plant list consists of a wide variety of species that are characteristic of this type of habitat, and there were no really plant – rich areas anywhere, with the exception of the edges of Ashenbank Wood, the sunken lanes and the area of road verge in the south - western extremity of the site. No ancient woodland indicators (AWIs) of the type described by Rose (1999) were found, but the presence of corn cockle and cornflower were notable, although both of these were included within a seeded wildflower meadow at the eastern end of the site (east of Scotland Lane).

The bird list was also typical of such a site, but could also have been much longer, particularly with the inclusion of winter migrant species such as fieldfare *Turdus pilaris* or woodcock *Scolopax rusticola* which might be expected to occur on the site from time to time, given the nature of some of the habitat (the data search indicates that both these species occur within the vicinity). Similarly the absence of summer migrants and BAP species was purely as a result of the poor timing of the survey.

The presence of linnet was not really surprising as the bird is widespread in Kent (Taylor, 1981). The bird's preferred nesting habitat includes gorse thickets, shrub thickets and hedges and similar places where there is dense cover (Gibbons *et al.*, 1993). This habitat has declined both nationally and locally and the bird has declined with it, although changes in modern farming techniques leading to the scarcity of weed seeds as a major element of the bird's diet are thought to be a major contributory factor (Mead 2000). It is possible that some of the smaller areas of disturbed ground and / or weeds that were present in some parts of Jeskyms Farm in 2005 may therefore be attractive to this bird. For the future, it is possible that the woodland edge, if appropriately managed, might provide both habitat and food for this species to a similar or even improved extent to that which currently exists.

Spotted flycatcher was represented by a single bird which was seen near the farm buildings, close to potential breeding habitat in a nearby garden. Spotted flycatcher is a typical bird of the woodland edge that is found in both natural and man–modified habitats, and is therefore found in gardens, farmyards, orchards, parkland and similar habitats (Taylor, 1981 and Snow and Perrins, 1998). However, mature gardens with trees are also attractive to this species and are thought to be as important to them as the woodland habitat (Marchant *et al.*, 1990). The species has been declining for some time, but the evidence suggests that the problem might be related to weather conditions encountered during the bird's migration (Marchant *et al.*, 1990 and Mead, 2000) rather than to anything else. If that is the case, then the species' conservation does not necessarily rely upon British conservation initiatives. However, this is

yet another species for which careful planning of habitat development would be of benefit, and for which significant conservation gains could easily be achieved.

The implications for house sparrow as a result of proposed changes of the site are likely to be negligible, partly because the species is neither likely to feed nor nest in much of the site at present, although it is common in some nearby dwellings and similar places. House sparrows sometimes nest in trees and hedges, but there is not much evidence of this happening at present in the site. It is thought that any planting of additional trees and hedges might help to make a small improvement to the status of this bird on site.

Turtle doves nest amongst low trees, especially in areas of light soil (Snow and Perrins, 1998), and their food is largely seeds and fruits of a wide variety of herbaceous plants (Snow and Perrins, 1998). The changes in modern farming practices which have led to decreased weed-seed availability in farmland have been a contributory factor for the decline of this species (Marchant *et al.*, 1980), but other factors are also involved (Mead, 2000). The species could be expected to breed in the existing small areas of scrub on the site from time-to-time rather than anywhere else, and to feed in the arable fields. Additional appropriate planting and habitat management will benefit this species significantly and could provide a noticeable conservation gain.

The data search revealed a number of bird species, which utilise farmland habitats as part of their habitat requirements. These include species such as the skylark (also seen during the management visit on 1<sup>st</sup> November), barn owl *Tyto alba*, little owl *Athene noctua*, and bullfinch *Pyrrhula pyrrhula*. Some of the birds listed within the data search have undergone rapid declines, leading to their inclusion on the UK BAP priority-list or species-of-conservation-concern list, or on the RSPB's red or amber lists. Habitat enhancements on Jeskyns Farm such as the creation of field margins, hedgrows and encouragement of the development of mature trees, should help to benefit many of these species.

It would have been surprising if badgers had not been present on site: the results of the data search alone indicate a high level of badger activity in the area, and this area of Kent has a surprisingly large number of setts, given the relatively poor habitat. Badgers will clearly take advantage of any tree planting or other changes away from the existing poor habitat, and it would not be surprising if they became more common in years to come as a result of landscape changes.

The results of the data search show a cluster of bat records from Ashenbank Wood and from Cobham village, and there is the potential to greatly enhance the habitat on Jeskyns Farm to encourage use by bats. At the time of the present survey (apart from a few big, isolated trees) there was no really suitable roosting habitat. The foraging habitat was a bit better, but would improve markedly if much greater habitat diversity were allowed to develop.

The database search reported a record of dormouse from Ashenbank Wood, and this survey found possible feeding signs of dormouse from along the wood edges of Ashenbank Wood and from Scotland Lane. However, dormouse is unlikely to be common on the site at present, owing to a general lack of suitable habitat. The creation of a more wooded area incorporating planting of additional trees and shrubs and hedgerows would benefit this animal.

Brown hare has declined significantly in Britain in recent years (Morris, 1993) and is very local in Kent (Philp, 2002). There is a long-standing problem with illegal hare-coursing in north Kent (*Martin Newcombe, personal observation*), which is aided by the openness of some of the areas (such as Jeskyns Farm) where it occurs. The species should be carefully considered during the preparation of habitat creation and management plans so that, with appropriate conservation measures, it should be possible to provide greater protection to enable an increase in line with the national BAP (<http://www.ukbap.org.uk/UKPlans.aspx?ID=410>).

The areas of potential reptile habitat within Jeskyns Farm were fairly small in size in terms of the size of the overall site, but there are tiny parts of the site that may be of use to animals for hibernation. The site is at present similar to the poor habitats for reptiles described by Beebee and Griffiths (2000) and Gent and Gibson (1998). However, in addition to the single viviparous lizard recorded during 2005, the database search revealed a palmate newt from the adjacent Ashenbank Wood. It would be worth considering undertaking a dedicated herptile survey in order to establish the current herptile interest of Jeskyns Farm. In the long-term it is considered that the creation of a less-intensively managed landscape incorporating features such as field margins, hedgerows and scrub may help to enhance the herptile population.

## MANAGEMENT RECOMMENDATIONS

The results of the 2005 database search together with the fieldwork undertaken as part of this project indicate that Jeskyns Farm appears to be of fairly limited ecological interest. It is considered that, in the short-term, there is minimal management that can be carried out to enhance the site, other than by ceasing or modifying arable agriculture in some areas so that wild plants may be encouraged, and by improving existing hedgerows.

A visit was made to Jeskyns Farm on 1<sup>st</sup> November 2005, with the aim of looking at potential management opportunities and it was felt that there is great scope for long-term enhancement of the wildlife interest of Jeskyns Farm. The rising elevation towards Ashenbank Wood provides an opportunity to create and manage a range of habitats that should compliment and enhance the land form and historical use of the area that could both enhance biodiversity and provide valued access opportunities for public benefit.

Specific examples could include:

- An increase in the amount of woodland present on site, especially in areas that are known to have been historically wooded. This may include copses, mixed-species plantations, hedgerows and green lanes.
- An increase in the amount of scrub.
- An increase in the number of mature specimen trees.
- An increase in the amount of permanent grassland on site, this may include neutral grassland and chalk grassland.
- The maximisation of edge habitat, along road verges and field margins.
- The creation of permanent waterbodies within the site.
- Provision of a wide range of nesting boxes and other features such as hibernacula for specific species such as birds, bats and reptiles.

Further information on these aspects is given below. Figure 5 has a map on which some possible ideas for habitat creation / wildlife enhancement have been shown. These are based purely on information gained from the 2005 database search, the field survey and the management visit and are the ideas of the Kent Wildlife Trust Consultancy only.

The Kent Downs AONB extends into the Jeskyns Farm site. The long-term landscape / habitat designs for Jeskyns Farm may also wish to take into account the characteristics and aspirations of the AONB.

**An increase in the amount of woodland**

The 1869 Ordnance Survey map for Jeskyns Farm ([http://www.old-maps.co.uk/oldmaps/index\\_external.jsp?eastings=566600&northing=169300](http://www.old-maps.co.uk/oldmaps/index_external.jsp?eastings=566600&northing=169300)) shows that whilst not extensively wooded, the site did have a number of shaws, including two surrounding both the green lanes, as well as a copse, and a small woodland (at Henhurst). A map showing the extent of these features extracted from the Ordnance Survey website has been enclosed within Figure 6.

The pattern of the woodland and the shape of the fields indicated on the 1869 map could give rise to the theory that the fields were 'assarts', created by woodland clearance. Further information to confirm or reject this theory could come from an examination of tithe maps (available within the County Records Office).

It is recommended that a tree planting programme aimed at recreating the extent of woodland present in 1869 should be considered. The choice of species used should be taken from the suite of species that naturally occur within the adjacent Ashenbank Wood. Care should also be taken to ensure that all trees are of native provenance.

During the management visit it was noted that the woodland boundary along the edge of Ashenbank Wood is beginning to naturally spread into the site itself. It was considered that this would be another obvious area to increase the woodland resource. However, in this instance, rather than do this through tree-planting, it is recommended that a wide field edge should be removed from arable cultivation, temporarily fenced and allowed to regenerate naturally.

The creation of woodland features such as those outlined above should, in the long-term be of benefit to a wide range of species including bats, badgers, nesting birds, small mammals such as dormice, reptiles and invertebrates.

There could be options for community involvement here if, for example, seeds from suitable tree species within Ashenbank Wood were gathered and distributed to interested local schools, community groups and residents to grow. Once the seedlings had reached a suitable size, there could be a community tree-planting day.

**An increase in the amount of scrub**

Scrub is an over-looked and often neglected habitat type and yet, with appropriate management, it has high wildlife value, particularly for small mammals, birds and insects. It is most valuable when it is managed to provide a diversity of age-stands, giving a constant supply of food such as nectar and berries.

At the time of the management visit, there were some limited areas of scrub on Jeskyns Farm. It was considered that there are opportunities for increasing the amount of scrub present on site.

For example, the recommendation above for expanding the woodland margin adjacent to Ashenbank Wood through nature regeneration would, in the short-to-medium term result in the development of a scrub and scrub woodland margin.

New scrub margins could also be encouraged to develop along the edges of existing tracks, leading to the eventual development of new green lanes.

**An increase in the number of mature specimen trees**

There are currently very few mature, specimen trees present within Jeskyns Farm. Mature trees may be valuable for birds (nesting, roosting & perching), bats (roosting), and, as they grow old, for deadwood specialists such as fungi and beetles.

It is recommended that consideration be given to selective planting of native specimen trees that will be encouraged to develop as 'veteran trees'.

**An increase in the amount of permanent grassland on site**

The recommendation here is to reduce the amount of arable land, with a slow, phased reversion to grassland, which may be managed as wildflower meadows, hay meadows, or used as pasture land.

The Kent Landscape Information System (KLIS) ([www.kent.gov.uk/klis](http://www.kent.gov.uk/klis)) indicates that the entire site has medium potential for the recreation of neutral grassland. The western half of the site has been identified as having medium potential for creation of chalk grassland, whilst parts of the site are also considered to have medium potential for acid grassland creation.

Given the fields have been cropped for many years, they are likely to have a high nutrient load. The nutrients will need to be stripped from the soils before re-seeding with an appropriate mix takes place. This may be done by growing a nutrient-hungry crop for one-two years prior to reversion.

The creation of appropriately managed permanent, semi-natural grassland should have significant benefits for mammals such as brown hare, birds, reptiles and insects including bees, butterflies, moths and hoverflies.

### **The maximisation of edge habitats**

Currently the arable fields are ploughed and cropped right up to the margins.

It is recommended that field margins, ideally 6m wide, should be left unploughed and uncultivated. These should be allowed to develop into rough grassland or scrub, being cut occasionally to maintain the desired habitat.

Rough vegetation along field edges may be valuable for birds such as barn owls, small mammals, bats (foraging habitat), reptiles, birds and insects.

### **Creation of permanent waterbodies**

The presence of permanent water on any site will usually benefit wildlife, attracting amphibians, birds and insects such as dragonflies and damselflies.

The IHCS indicated one waterbody on Jeskyns Farm, in a hollow on the western boundary of Scotland Lane. The hollow was dry when visited on 1<sup>st</sup> November 2005.

It is recommended that consideration be given to creating a permanent waterbody at this location.

In addition it was noted that the field immediately to the south of Jeskyns Road appeared to be relatively low-lying and had standing water present on 1<sup>st</sup> November 2005.

It is recommended that the feasibility of creating a wet area here should be investigated. This might include a pond, or creation of wet grassland and wet woodland with a scrape that might attract waders.

**Provision of nesting boxes and a wide range of other features.**

There are currently few features suitable for nesting species such as birds and bats.

It is recommended that bird, bat and dormouse nesting boxes should be erected whenever suitable opportunities arise.

Log piles and piles of rubble could also be made in suitable locations to provide suitable hibernation places for hedgehogs, reptiles and invertebrates.

**ADDITIONAL SURVEY WORK**

There are some groups of species, where more detailed knowledge of the range of species, their exact occurrence and population sizes, could be beneficial, particularly in terms of influencing the design plan.

These are:

- Breeding bird survey.
- Wintering bird survey.
- Herptile survey (amphibians and reptiles).
- Dormouse survey.
- Brown hare survey

**BIBLIOGRAPHY**

Beebee, T., and Griffiths R. 2000. *Amphibians and reptiles*. Collins New Naturalist no. 87.

Biodiversity Steering Group. 1995. *Biodiversity: the UK. Steering group report. Volume 2. Action plans*. HMSO.

Christopher Betts Environmental Biology. 2001. *Checklist of protected British species*. Worcester, C. J. Betts.

Gent T. and Gibson S. 1998. *Herpetofauna workers' manual*. Peterborough, JNCC.

Gibbons D. W. Reid J. and Chapman R. A. 1993. *The new atlas of breeding birds in Britain and Ireland*. T. & A.D. Poyser.

Kent & Medway Biological Records Centre. 2005. *Report regarding Jeskyns Farm, Cobham, Gravesend*. Unpublished.

Marchant J., Hudson R., Carter S. and Whittington P. 1990. *Population trends in British breeding birds*. Tring, Hertfordshire, BTO.

Mead, Chris 2000. *The state of the nation's birds*. Stowmarket, Suffolk, Whittet Books.

Morris P. A. 1993. *A red data book for British mammals*. London, Mammal Society

Philp E. 1982. *Atlas of the Kent flora*. Maidstone, Kent Field Club.

Philp, E. (Ed.). 2002. *Provisional Kent Mammal Atlas*. Kent Mammal Group.

Rich, T. 1998. Squaring the circle - bias in distribution maps. *British Wildlife* 9 (4) 213 - 219.

Rose, F. 1999. Indicators of ancient woodland – the use of vascular plants in evaluating ancient woods for nature conservation. *British Wildlife* 10(4) 241 – 251.

Slingsby D. and Cook C. 1987. *Practical ecology*. London, Macmillan Education.

Snow D. W. and Perrins C. M. 1998. *The birds of the Western Palearctic. Concise Edition Vol. 2*. Oxford University Press.

**Sutherland W. J. 2000. *The conservation handbook: research, management and policy*. London, Blackwell.**

**Taylor D. W. (Ed.) 1981. *The birds of Kent*. Maidstone, Kent Ornithological Society.**

**Waite A. (Ed.). 2000. *The Kent red data book*. Maidstone, Kent County Council.**