

Report of ecology & protected species survey of land off Spalding Road, Pinchbeck, Lincolnshire



Tim Smith
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1 Introduction

Tim Smith, a freelance ecologist, has been commissioned to undertake an ecology and protected species survey of land off Spalding Road, in Pinchbeck, near Spalding in Lincolnshire, in connection with a proposed residential redevelopment. This text and the accompanying photographs comprise the ecology and protected species report.

Tim Smith has a BSc (Hons) Ecology from Lancaster University and he has 30 years' experience of working in the ecology and nature conservation fields, with Local Authorities, Statutory Nature Conservation Bodies, Voluntary Nature Conservation Bodies and various Ecological Consultancies. He is a freelance ecologist, based in Horncastle in Lincolnshire.

2 Survey methods

A walk-over survey of the site, and adjacent land where access was possible, was undertaken. Habitats were recorded and mapped; plants were recorded (including searching for invasive alien species); and use of the site by, or the potential for use by, protected species was searched for. Photographs were taken.

The survey was undertaken on 4 May 2016.

A search for existing ecological and protected species records for the site and immediate environs was undertaken by reference to the MAGIC and National Biodiversity Network (NBN) websites. In addition, reference was made to an ecology report of a survey in 2013 of adjacent land for an unrelated planning application.

3 Site description

3.1 Location and adjacent land

The site is located on the east side of Spalding Road, in Pinchbeck, to the north of Spalding in Lincolnshire. The grid reference of the site's centre is approximately TF 246 247.

To the north there is arable land. To the west there is a tarmac track then

houses and gardens which line the east side of Spalding Road, beyond which is Spalding Road (the B1356) and arable land. To the south there is a disused commercial property with buildings and tarmac hardstanding, and also a small area of rough grassland. To the east there is an area of overgrown land with dense brambles and scattered scrub and saplings.



Arable land to the north



Disused commercial premises to the south

The MAGIC web site shows that the site has no statutory nature conservation designation and that no such site is adjacent. The nearest statutory nature conservation site is Vernatts Local Nature Reserve, which is c650m south-east across extensive built land.

3.2 Site habitats and plants

The western boundary of the site is a wooden railing fence. On the fence grows a small amount of ivy and three ornamental climbing plants, one of which is a clematis.

Along the foot of the fence are common nettle, dandelion, cow parsley, hogweed, barren brome and ground elder.



Western boundary fence



Ornamental climbing plants on western boundary fence

The southern boundary is partly a wooden railing fence identical to that along the western boundary and partly it is the side of an adjacent brick building which has ivy growing up it, and at the very eastern end beyond the end of the wall, the eastern boundary is a chain link fence with concrete posts and tall scrub of hawthorn and elder with bramble. Against the wall are ash saplings, brambles and bushes of elder and hawthorn. At the foot of the wall there are the remains of a wooden fence and old metal fence posts as if there was a boundary feature along here set just in from the wall but it has now gone.

The eastern boundary runs undefined across land overgrown with dense brambles and scrub.



Wooden railing fence along part of southern boundary



Wall of adjacent brick building on southern boundary



Chain link fence at eastern end of southern boundary



Undefined eastern boundary looking south

The northern boundary is largely a tall (4-8m) gappy hedge which stands over a shallow small shaded dry ditch, but at the boundary's eastern end the hedge is no longer present and the boundary is a small shallow wet ditch, with much algae and reed canary-grass.

The hedge has hawthorn, a currant species and elder, and one mature multi-stemmed ash tree with sparse ivy cover occurs near the western end. The hedge bottom flora has ivy, common nettle, cow parsley, cleavers, lesser celandine and creeping thistle. Gaps in the hedge are full of bramble and common nettle.

The ditch is dry and full of twigs etc with only sparse common nettle. Garden waste, including grass cuttings and thrown out plants, are in the ditch.



Northern boundary hedge



Ash tree in northern boundary hedge

The banks of the northern boundary wet ditch have common nettle, bramble, cow parsley, false oat-grass, great willowherb, hogweed and creeping thistle.



Small wet ditch at eastern end of northern boundary

The body of the site is much overgrown with dense brambles, scrub, tall herbs and rough grass.

The dense brambles occupy c60% of the site's area. The rough grass habitat occurs along the western edge, in the north-western corner and along the southern side next to the adjacent building. Plants present in the rough grass habitat are false oat-grass, cow parsley, ground elder, common nettle, barren brome, dandelion, creeping thistle, spear thistle, cleavers, hogweed, white dead-nettle, great willowherb, common couch, bramble, broad-leaved dock, milk thistle, and various garden plants including bluebell and daffodil. The rough grass occupies c10% of the site's area.



Dense bramble habitat



Dense bramble habitat



Rough grass habitat



Rough grass habitat

The tall herb habitat occupies c30% of the site's area and species which are locally dominant in this are great willowherb, common nettle and pendulous sedge.



Dense pendulous sedge

Scattered over the brambles, tall herbs and rough grass habitats are saplings of ash and scrub and suckers of hawthorn, butterfly-bush, elder, holly and plum.



Ash saplings



Rough grass with dense brambles behind

No invasive alien plants (as defined by Schedule 9 of the Wildlife & Countryside Act, 1981 and as amended) were found on the site.

3.3 Protected Species

Badgers

The site has no badger setts and no signs of use by badgers were seen on the site.

NBN had no records of badgers for the site or immediate area, and the nearest badger records on NBN were from localities at least 2km distant to the north-east. No signs of badger activity were noted by the 2013 ecology survey of the land adjacent.

Water voles, otters and freshwater crayfish

The only open water habitat on the site is the small wet ditch along the eastern part of the northern boundary. This is wholly unsuitable for use by water voles, freshwater crayfish and otters and so these species would not occur at the site. No signs of water voles were seen at this ditch.

NBN had no records of these species for the site or immediate area. The only signs of water vole activity noted by the 2013 ecology work were in Pennygate Drain which is located c250m east and not connected to the site's northern boundary ditch.

Reptiles

No reptiles were seen on the site in the open, or on or under refuges. It is considered that the site would not support reptiles because it is a small site which is much overgrown with scrub and brambles, and it is isolated amongst arable land and built land from habitats which could support reptiles and from which they could disperse to reach the site.

NBN had no records of reptiles for the site or immediate area. No reptiles were noted by the 2013 ecology survey of the land adjacent which concluded that their site did not have any suitable habitat to support reptiles.

Barn owls and other birds

The site has no buildings or built structures which could be used by barn owls for nesting or roosting. None of the trees has any features, like holes in trunks, which could be used by barn owls for nesting or roosting. The much overgrown nature of the site means that it is unlikely to attract hunting barn owls which are coming from off-site roosts and nests.

NBN had no records of barn owls for the site or immediate area and the nearest barn owl record on NBN was from a locality at least 2km distant. The 2013 ecology report of the land adjacent did not note any potential for barn owls.

No old or active birds' nests were seen on the site, although the boundary hedge, and scrub and dense brambles of the body of the site are suitable bird nesting habitat. The body of the site is far too overgrown and overlooked by the hedgerow and scrub to be used by ground nesting skylarks.

Birds seen and heard on the site at the time of survey were blackcap, blackbird, wren, dunnock, chiffchaff, whitethroat, chaffinch, great tit, woodpigeon and collared dove. Some of these species may nest on the site. Bird activity on the site was shared with the gardens to the west and the off-site scrub and brambles to the east.

The 2013 ecology survey of the land adjacent noted the presence of a number of common farmland and sub-urban birds, with those additional to the birds noted by the current survey being mallard, pheasant, black-headed gull, robin, blue tit, magpie, rook and crow. Some of these species may also use the current site.

Great crested newts

The site has no pond or other open waterbody which is suitable for great crested newts to use for breeding in. The ditch along the eastern part of the northern boundary is too small and shallow to be used by breeding great crested newts.

The site has extensive habitat which could be used by great crested newts for sheltering and foraging, which could be dispersing from off-site breeding ponds. This habitat is the rough grass, dense brambles and the base of the boundary hedge.

Newts can disperse away from breeding ponds in suitable terrestrial habitats and it has been shown by Natural England research work (eg report number 576, dated 2004) on capture of newts away from breeding ponds (which can be used as a measure of dispersal) that newts very rarely disperse over c150-200m from breeding ponds given suitable habitats around and away from the breeding ponds. It is therefore necessary to consider whether there are any nearby off-site ponds which could be suitable for newts and then assess the likelihood of newts dispersing to reach the proposed development site.

Searches of maps and aerial photographs and other sources showed that the only pond in the vicinity of the site is that near Otway House which is c560m north across arable land and built land.

This pond is too far from the site and separated from it by habitats which are sub-optimal for newts, so even if newts do occur at the pond, they would not disperse to reach the site.

Taking the above into consideration, it is concluded that great crested newts would not be present on the development site.

NBN had no records of this species for the site or immediate area. No newts were noted by the 2013 ecology survey of the land adjacent which concluded that the drains on their site did not have any suitable habitat to support breeding great crested newts.

Roosting and foraging bats

The site has no buildings or built structures which could be used by bats for roosting in. None of the trees has any features, like holes or cracks, which could be used by roosting bats. The ivy on the mature ash tree in the northern hedge is not dense and would not shelter bats.

There is likely to be some use of the site by foraging and commuting bats which are coming from off-site roosts. Such use is likely to be concentrated along the site's northern boundary hedge where there is some shelter.

NBN had no records of bats for the site. There were records of pipistrelle bats from localities c1km south and south-east, but none for the site or immediate area. The 2013 ecology survey of the land adjacent concluded that the trees on their site only had low potential to support roosting bats.

4 Assessment of nature conservation importance

4.1 Site habitats and plants

The site is not of significance for its habitats which are common and widespread in agricultural areas and at the fringes of built up areas, as here.

None of the hedges are of importance for wildlife under the terms of the 1997 Hedgerow Regulations (HR) since their diversity of native trees and shrubs is low and below the required threshold for this part of the country.

The site is not of significance for plant species, since they are common and widespread species of hedges, scrub, grasslands, wetlands and disturbed ground in the British lowlands. There are no rare or scarce plants and none of UK or Lincolnshire biodiversity significance.

The site is not of significance for invasive alien plants (none occur).

4.2 Protected species

Badgers

The site is not of significance for badgers.

Water voles, otters and freshwater crayfish

The site is not of significance for these species.

Reptiles

The site is not of significance for reptiles.

Barn owls and other birds

The site is not of significance for barn owls.

The site is not likely to be of significance for other breeding birds since nesting habitats are limited in extent and scope, the site does not have any habitats which are not found in the local area and there are no habitats which could be used by specially protected birds (ie Wildlife & Countryside Schedule 1 species) for nesting.

Great crested newts

The site is not of significance for breeding or sheltering great crested newts.

Roosting and foraging bats

The site is not of significance for roosting or foraging bats.

5 Potential ecology constraints

5.1 Site habitats and plants

The site's habitats are not a constraint to the proposed development.

There are no constraints to the proposed development from plant species, including invasive alien plants.

No statutory or non-statutory nature conservation site would be affected by the development of this site.

5.2 Protected species

Badgers

There are no constraints to the proposed development from badgers.

Water voles, otters and freshwater crayfish

There are no constraints to the proposed development from these species.

Reptiles

There are no constraints to the proposed development from reptiles.

Barn owls and other birds

There are no constraints to the proposed development from barn owls.

Breeding birds are a constraint since the development will require the clearance of potential bird nesting habitat.

This constraint however only applies during the bird breeding season, which is roughly March to August inclusive. Nesting birds are not a constraint outside the breeding season ie September to February inclusive.

Great crested newts

There are no constraints to the proposed development from breeding or sheltering great crested newts.

Roosting and foraging bats

There are no constraints to the proposed development from roosting or foraging bats.

6 Mitigation and enhancement

6.1 Site habitats and plants

No mitigation is required for the site's habitats. Habitats could be enhanced through the use of native trees and shrubs to fill gaps in the northern boundary hedge and to create a hedge along the site's eastern boundary.

No mitigation or enhancement is required for plant species, including invasive alien plants.

6.2 Protected species

Badgers

No mitigation or enhancement is needed for badgers.

Water voles, otters and freshwater crayfish

No mitigation or enhancement is needed for these species.

Reptiles

No mitigation or enhancement is needed for reptiles.

Barn owls and other birds

No mitigation or enhancement is needed for barn owls.

Standard mitigation for nesting other birds is appropriate. No mitigation would however be required if clearance of potential nesting habitat is scheduled for outside the bird nesting season. If clearance works are proposed for during the nesting season, then prior inspections of the affected habitats should be undertaken to ensure that no active nests are present. If any are found, they would have to be marked and buffer zones established, and work would have to take place elsewhere or be temporarily suspended, until the young birds have fledged and left the nest, and after making sure that no other brood is established.

No enhancements for breeding birds are necessary at this site.

Great crested newts

No mitigation or enhancement is needed for breeding or sheltering great crested newts.

Roosting and foraging bats

No mitigation is needed for roosting or foraging bats. The site could be enhanced for roosting bats through the provision of bat roosting boxes which could be attached to the mature ash tree in the northern hedge. No enhancement is needed for foraging bats.

A handwritten signature in black ink that reads "Tim Smith". The script is cursive and fluid, with the first name "Tim" and last name "Smith" clearly distinguishable.

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