



## **Land at Teversham Road, Fulbourn**

### **Breeding Bird Survey Report 2014**

**January 2017**

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#### Document Issue Log

Version / Issue	Comment	Date	Author	Checked by	Approved by
1	Issued	09/01/2017	Robin Ward	Ian Ellis	Tim Norman
2					

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## Contents

1. Executive summary .....	1
2. Introduction .....	1
Aims and scope of the report .....	1
Site description .....	1
Proposed development.....	1
Legislation and guidance.....	1
3. Methodology.....	2
Survey area .....	2
Survey of breeding birds .....	2
Evaluation of breeding bird community .....	5
Surveyors .....	5
Constraints.....	5
4. Results.....	6
Breeding bird survey.....	6
Evaluation of species recorded.....	7
<i>House Martin</i> .....	7
<i>Starling</i> .....	8
<i>Song Thrush</i> .....	8
<i>Mistle Thrush</i> .....	8
<i>Dunnock</i> .....	8
<i>House Sparrow</i> .....	8
<i>Linnet</i> .....	9
<i>Corn Bunting</i> .....	9
5. Evaluation and Recommendations .....	11
Evaluation .....	11
Assessment of Impacts .....	11
6. Biodiversity enhancements.....	12
7. Conclusion.....	12
8. Reference .....	12

## 1. Executive summary

- 1.1. Following recommendations made in the Phase 1 Habitat Survey Report (MKA Ecology Ltd, 2014a), MKA Ecology Ltd was commissioned to undertake a Breeding Bird Survey at Land off Teversham Road, Fulbourn (MKA Ecology Ltd, 2014b). The purpose of the survey was to provide an assessment of the potential impacts of the proposed development upon the local breeding bird community. The survey was undertaken between 21 May and 30 June 2014.
- 1.2. Five visits were undertaken during this period, with the surveyor walking over all habitats present on site on each visit following a standard methodology for breeding bird surveys (Marchant 1983; Bibby *et al.* 1992). The species, number, location and any breeding activity were recorded on a map using standard BTO codes. The route taken was alternated on each visit to ensure that different parts of the survey area were visited during different stages of the morning. A territorial analysis was undertaken based on a standard technique (Marchant 1983; Bibby *et al.* 1992), with any evidence of breeding activity considered to constitute a territory for the purposes of assessing the impacts of the development. Following a review that suggested that unjustified significance had been placed in interpreting isolated registrations of breeding behaviour, NIRAS Consulting Ltd (NIRAS) was commissioned to repeat the territorial analysis and where appropriate, update the evaluation and recommendations based on the revised results.
- 1.3. A total of thirty-five species were recorded within the survey area, twelve of which were considered to be breeding. Eight species of conservation concern were recorded during the breeding bird surveys, two of which were considered to be breeding (Song Thrush and Dunnock). The bird community present on site was considered to be typical for woodland edge habitats.
- 1.4. No significant congregations of any species of conservation concern were recorded on site during the breeding period. Therefore no significant adverse impacts upon these breeding populations were predicted as a result of the proposed development, provided that the habitat types favoured as nesting locations for Song Thrush and Dunnock (in the form of hedgerows and scrub) are included within the retained landscaping scheme for the development.
- 1.5. Additional recommendations are made to avoid vegetation clearance works during the breeding bird season (between the months of March and August inclusive). Any vegetation clearance work undertaken within this period would require nesting bird checks, which could still lead to substantial delays in the works schedule if (as is likely) nests are located.
- 1.6. Further recommendations are proposed to enhance the value of the site for breeding birds through the preparation of an Ecological Management Plan for nesting birds, in accordance with the National Planning Policy Framework. In addition, native plant species should be incorporated within the planting scheme for the development in order to increase invertebrate numbers on site and thereby increase prey sources for breeding birds.

## 2. Introduction

### Aims and scope of the report

- 2.1. In response to the recommendations made in the Phase 1 Habitat and Protected Species Scoping Report (MKA Ecology Ltd, 2014), MKA Ecology Ltd was commissioned to undertake a Breeding Bird Survey at land off Teversham Road, Fulbourn. The survey was carried out between the 21 May and 30 June 2014, with the aims being to
- Recording bird species present on site and any signs of breeding activity;
  - Assessing bird communities present on site;
  - Providing recommendations for mitigation where required; and
  - Providing recommendations for biodiversity enhancements with regards to breeding birds.

### Site description

- 2.2. The land off Teversham Road is located on the north-western edge of the village of Fulbourn (centred on grid reference TL 513 566) and is hereafter referred to as 'the site'. The site is bounded by the main line railway between Cambridge and Ipswich to the north, and residential properties to the east, south and west.
- 2.3. The Phase 1 Habitat survey undertaken on 18 September 2012 (and updated on 6 June 2014) found the site to comprise of two large fields of semi-improved neutral grassland (dominated by horsetail *Equisetum arvense* and false oat-grass *Arrhenatherum elatius* although also containing some strong neutral grassland indicator species such as adder's tongue fern *Ophioglossum* sp., yellow rattle *Rhinanthus minor* and early marsh orchid *Dactylorhiza incarnate*). The fields were bisected by a ditch containing flowing water, and bounded by hedgerows. Small areas of semi-natural broadleaved woodland, mixed plantation woodland and improved grassland were present to the north and south of the fields. A pond was present in the south of the site.
- 2.4. The wider landscape is dominated by arable fields with associated ditches and hedgerows. The city of Cambridge is located to the west of the site.

### Proposed development

- 2.5. The application seeks outline planning permission for a high quality residential development of up to 110 homes, with areas of landscaping and public open space, one new access point and associated infrastructure works on land off Teversham Road, Fulbourn in the South Cambridgeshire district. It is proposed that all detailed matters (other than means of access) including layout, scale, appearance and landscaping will be determined as part of a reserved matters application.

### Legislation and guidance

- 2.6. The EU Birds Directive (2009/147/EC) relates to all naturally occurring birds in the wild within the European Community and addresses the protection, management and control of these species. The provisions apply to birds, their eggs, nests and habitats.
- 2.7. The species listed in Annex I of the Directive are the subject of special conservation measures to ensure their survival and reproduction in their area of distribution. These measures shall take account of:
- Species in danger of extinction;
  - Species vulnerable to specific changes in their habitat;

- Species considered rare because of small populations or restricted local distribution; and
  - Other species requiring attention.
- 2.8. In the UK, all wild birds (defined as any species listed on Category A, B or C of the British Ornithologist Union's British List (BOU, 2012)) are protected under the Wildlife and Countryside Act 1981 (as amended). The Act makes it an offence to:
- Wilfully or recklessly kill or injure any species of wild bird;
  - Wilfully or recklessly damage or destroy an active bird's nest or bird eggs; and
  - Intentionally take any wild bird, their nests or their eggs.
- 2.9. In addition some species, listed on Schedule 1 of the Act, are afforded additional protection from wilful or reckless disturbance of adult birds at an active nest site or whilst with dependant young.
- 2.10. Furthermore, any bird species formally listed on the UK Biodiversity Action Plan (BAP) is classified as a Species of Principal Importance for Conservation under Section 41 of the Natural Environment and Rural Communities (NERC) Act (2006). The NERC Act places a legal obligation on developers to ensure that the conservation status of all UK BAP species found on the Application Site is maintained and, where possible, enhanced.
- 2.11. Further guidance is sought from Birds of Conservation Concern<sup>4</sup> (Eaton *et al.*, 2015), which provides a review of the population status of birds in the UK.

### 3. Methodology

#### Survey area

- 3.1. The survey area was defined as the area enclosed within the site boundary (see Figure 3.1).

#### Survey of breeding birds

- 3.2. For territorial and semi-colonial species, the method used in this survey was based on the British Trust for Ornithology's (BTO) reduced-effort Common Bird Census (CBC) territory mapping technique (Marchant 1983; Bibby *et al.* 1992). The territory mapping method allows the distribution of bird territories across the survey area to be determined and from this, a count of the number of breeding pairs for each species can be derived. This technique allows the relative importance of different parts of the survey area to be evaluated by comparing species densities across the survey area.
- 3.3. For non-territorial and non-breeding species, the territory mapping technique is not appropriate. Instead, peak counts for the Application Site as a whole were derived from the survey. The peak count for a species was taken as the highest number of individuals recorded on a visit out of the five visits made.
- 3.4. Visits were undertaken early in the morning, between 05:00 – 09:30. The whole survey area was covered in each visit, using suitable optical equipment (binoculars) to observe bird behaviour. The species, number, location and any breeding activity were recorded on a map using standard BTO codes. The route taken was alternated on each visit to ensure that different parts of the Application Site were visited during different stages of the morning.
- 3.5. The records of birds made on each visit were collated to determine the approximate location and numbers of breeding pairs for territorial and semi-colonial species and to give an indicative total for the survey area as a whole for non-territorial and non-breeding species. The territorial analysis was based on a standard technique (Marchant 1983; Bibby *et al.* 1992) where most critically at least two

registrations of breeding behaviour are required to determine a territory cluster when 8 or fewer surveys visits are undertaken (as in this case). It is also required that at least two registrations from a territory cluster must be recorded at least 10 days apart. However, a single record of a nest with eggs or young can be counted as a cluster even in the event of adult birds not being record at the appropriate qualifying level (Bibby *et al.*, 1992).

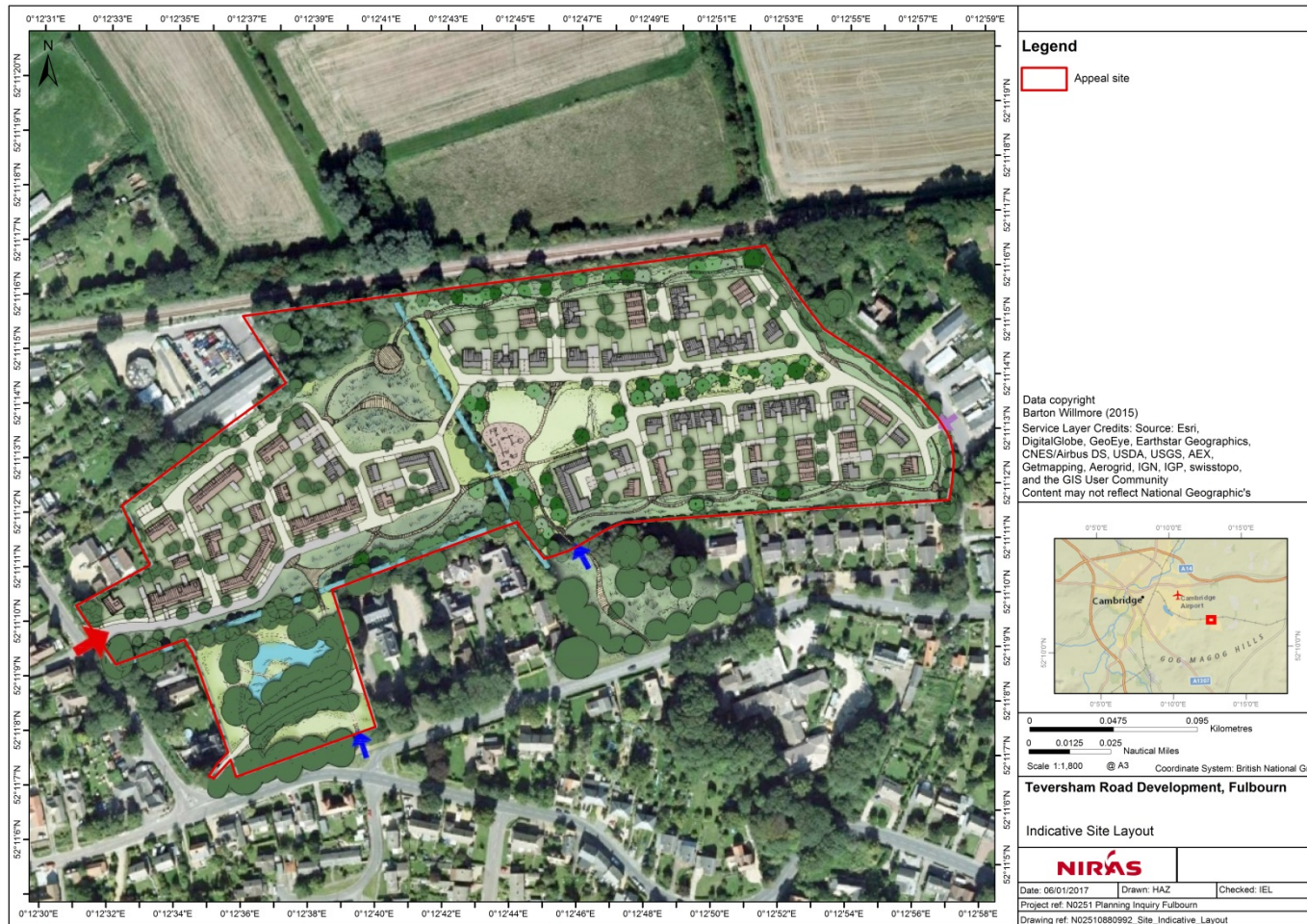


Figure 3.1: Breeding Bird Survey Area and indicative site layout of the proposed development at Land off Teversham Road, Fulbourn



3.6. Five visits were undertaken between 21 May and 30 June 2014. Details of timings and weather conditions for each survey can be found in Table 1.

**Table 3.1: Weather data for Breeding Bird Survey at Land off Teversham Road, Fulbourn**

Visit	Date	Temp. (°C)	Cloud Cover (Oktas /8)	Wind Speed	Wind Direction	Rain
1	21/05/2014	13°C	4	Calm	n/a	Dry
2	30/05/2014	11°C	6	Force 1	NE	Dry
3	09/06/2014	13°C	0	Force 1	NE	Dry
4	17/06/2014	13°C	4	Calm	n/a	Dry
5	30/06/2014	11°C	4	Calm	n/a	Dry

#### **Evaluation of breeding bird community**

3.7. An assessment of the ornithological importance of the Application Site was made by evaluating the species recorded as breeding/potentially breeding on the Application Site against the following conservation status criteria:

- Annex 1 of the EU Birds Directive (2009/147/EC);
- Schedule 1 of the Wildlife and Countryside Act (1981, amended 1985);
- Species of Principal Importance for Conservation (NERC Act 2006);and
- Birds of Conservation Concern (BoCC) Red and Amber Lists (Eaton *et al.*, 2015).

3.8. Whilst the BoCC Red and Amber Lists are not enforced through legislation or national planning policy, they provide a useful indication of the current population trends for all British species and are therefore a valuable evaluation tool.

3.9. The bird taxonomy used throughout this report follows that of the British Ornithologist's Union (BOU, 2013).

#### **Surveyors**

3.10. The surveys were undertaken by Will O'Connor (Director and Senior Ecologist, MKA Ecology Ltd), Sofia Morcelle (Ecologist, MKA Ecology Ltd) and James Hanlon.

#### **Constraints**

3.11. The methodology for analysing the species holding a follows specific guidance on the CBC technique (Bibby *et al.*, 1992). Some migratory species (for example Firecrest and *Phylloscopus* warblers) are known to sing on migration and for this reason the guidance is strictly followed to determine an appropriate baseline. This is therefore potentially some risk that for some species the number of territories are underestimated with five survey visits; it is therefore paramount that surveys were undertaken in good weather conditions and at the appropriate time of day (i.e. immediately after dawn) to maximise exposure to birds exhibiting breeding behaviour.

## 4. Results

### Breeding bird survey

- 4.1. A total of thirty-five species were recorded during the breeding bird surveys within the survey area, three of which were only recorded in flight over the site. Twelve of the thirty-five species were considered to be breeding. The number of territories of territorial breeding birds and peak counts of non-territorial and non-breeding species recorded across the survey area is shown in Table 4.1 below.
- 4.2. The three species that were only recorded in flight over the site, with no evidence of site usage, are not taken forward in evaluating the breeding bird assemblage.

**Table 4.1: Peak count and number of territories of all bird species recorded at Land off Teversham Road, Fulbourn\***

Common Name	Scientific Name	Breeding Territories On Site	Peak Count (Visit)
Mute Swan	<i>Cygnus olor</i>	-	1 (1)
Mandarin Duck	<i>Aix galericulata</i>	-	1 (2)
Little Egret	<i>Egretta garzetta</i>	-	1 (2)
<b>Woodpigeon</b>	<b><i>Columba palumbus</i></b>	<b>1</b>	
Collared Dove	<i>Streptopelia decaocto</i>	-	4 (5)
Turtle Dove	<i>Streptopelia turtur</i>	-	1 (3)
Green Woodpecker	<i>Picus viridis</i>	-	1 (1, 2, 3, 4)
Great Spotted Woodpecker	<i>Dendrocopos major</i>	-	3 (4)
Magpie	<i>Pica pica</i>	-	2 (2)
Jay	<i>Garrulus glandarius</i>	-	3 (2)
Jackdaw	<i>Corvus monedula</i>	n/a	11 (3)
Carrion Crow	<i>Corvus corone</i>	-	2 (3)
<b>Blue Tit</b>	<b><i>Cyanistes caeruleus</i></b>	<b>1</b>	
<b>Great Tit</b>	<b><i>Parus major</i></b>	<b>1</b>	
Coal Tit	<i>Periparus ater</i>	-	1 (3)
Swallow	<i>Hirundo rustica</i>	-	2 (2, 3)
House Martin	<i>Delichon urbicum</i>	-	3 (2)
Long-tailed Tit	<i>Aegithalos caudatus</i>	-	5 (2)
<b>Chiffchaff</b>	<b><i>Phylloscopus colybita</i></b>	<b>3</b>	
<b>Blackcap</b>	<b><i>Sylvia atricapilla</i></b>	<b>2</b>	
Lesser Whitethroat	<i>Sylvia curruca</i>	-	1 (2)
Whitethroat	<i>Sylvia communis</i>	-	2 (3)
<b>Wren</b>	<b><i>Troglodytes troglodytes</i></b>	<b>7</b>	
Starling	<i>Sturnus vulgaris</i>	n/a	3 (2,3)
<b>Blackbird</b>	<b><i>Turdus merula</i></b>	<b>4</b>	
<b>Song Thrush</b>	<b><i>Turdus philomelos</i></b>	<b>2</b>	
Mistle Thrush	<i>Turdus viscivorus</i>	-	1 (1, 3)
<b>Robin</b>	<b><i>Erithacus rubecula</i></b>	<b>2</b>	
<b>Dunnock</b>	<b><i>Prunella modularis</i></b>	<b>1</b>	
House Sparrow	<i>Passer domesticus</i>	-	2 (1)
<b>Chaffinch</b>	<b><i>Fringilla coelebs</i></b>	<b>3</b>	
<b>Greenfinch</b>	<b><i>Chloris chloris</i></b>	<b>1</b>	
Linnet	<i>Carduelis cannabina</i>	-	1 (1)
Corn Bunting	<i>Emberiza calandra</i>	-	1 (2)

\* Breeding birds (including both territorial and non-territorial species) are highlighted in bold.

#### Evaluation of species recorded

4.3. Eight of the thirty-two species recorded using the survey area meet the criteria for conservation concern (see section 3.7). These species recorded at the site are shown in Table 4.2, together with their conservation status. These included:

- No species listed under Annex 1 of the EU Birds Directive (2009/147/EC).
- No species listed under Schedule 1 of the Wildlife and Countryside Act (1981).
- Three of these species are Species of Principal Importance (NERC Act 2006). These are: Dunnock, House Sparrow and Linnet.
- Six of these species are included on the Birds of Conservation Concern Red List. These are: Starling, Song Thrush, Mistle Thrush, House Sparrow, Linnet and Corn Bunting.
- Two of these species are included on the Birds of Conservation Concern Amber List. These are: House Martin and Dunnock.
- Four species is included on the Cambridgeshire and Peterborough Local BAP: Song Thrush, House Sparrow, Linnet and Corn Bunting.

4.4. Two species meeting the criteria for conservation concern were considered to be breeding (Song Thrush and Dunnock).

**Table 4.2: Conservation status of the bird species recorded at Land off Teversham Road, Fulbourn**

Common Name	Scientific Name	Confirmed breeding	Annex 1 EU Birds Directive	Sch 1	UK BAP/SPI	Local BAP	Red List	Amber List
House Martin	<i>Delichon urbicum</i>							✓
Starling	<i>Sturnus vulgaris</i>				✓		✓	
Song Thrush	<i>Turdus philomelos</i>	✓			✓	✓	✓	
Mistle Thrush	<i>Turdus viscivorus</i>						✓	
Dunnock	<i>Prunella modularis</i>	✓			✓			✓
House Sparrow	<i>Passer domesticus</i>				✓	✓	✓	
Linnet	<i>Linaria cannabina</i>				✓	✓	✓	
Corn Bunting	<i>Emberiza calandra</i>				✓	✓	✓	

4.5. All of the species recorded that meet conservation criteria are discussed in more detail below:

#### **House Martin**

4.6. A widespread and abundant summer visitor, House Martin is listed on the BoCC Amber List due to a moderate breeding population decline in the UK and a wider population decline across Europe.

- 4.7. A peak count of three individuals were recorded foraging over the grassland habitats on 30 May. No suitable breeding habitat for the species was present on site, and therefore no signs of breeding activity were recorded.

#### ***Starling***

- 4.8. Starling is a widespread and numerous resident breeding species which has undergone a severe decline in the UK breeding population size in the short and long term, defined as over 25 years and since 1969 respectively. Consequently, the species is listed as a UK BAP Priority Species and is included on the BoCC Red List. Starling is a colonial nesting species, with several pairs nesting in close proximity to each other.
- 4.9. In 2014, Starling breeding activity was recorded in the south-east of the site with adults carrying food to juveniles in the hedgerows along the southern boundary. A peak count of three individuals were recorded on site on 30 May and 9 June, and it was therefore considered that the main Starling colony in the vicinity of the site was located outside of the survey area.

#### ***Song Thrush***

- 4.10. Song Thrush is a widespread and common resident breeder which has undergone a severe decline in the UK population size since 1969. As a result, Song Thrush is listed as both a UK BAP and a Cambridgeshire Local BAP Priority Species, and is included on the BoCC Red List.
- 4.11. The breeding distribution of Song Thrush in 2014 was associated with the hedgerow habitats bordering the site, with a total of two territories located within the site (see Figure 4.1).

#### ***Mistle Thrush***

- 4.12. A numerous and widely distributed breeding resident, Mistle Thrush has undergone a severe decline in the UK breeding population size since 1969 and moderate population decline in more recent years, leading to the species' inclusion on the BoCC Red List.
- 4.13. A single individual was recorded on 21 May and 9 June in woodland and hedgerow habitats on site. Whilst suitable nesting habitat for the species was present on site, no signs of breeding activity were recorded.

#### ***Dunnock***

- 4.14. Dunnock is a common and widespread breeding resident which has undergone a moderate decline since the mid-1970's. As a result, Dunnock is designated as a UK BAP Priority Species and is included on the BoCC Amber List.
- 4.15. The breeding distribution of Dunnock in 2014 was associated with the hedgerow habitats bordering the site, with a total of one territory located within the site (see Figure 4.1).

#### ***House Sparrow***

- 4.16. House Sparrow is a widespread and numerous resident breeding species which has undergone severe population declines in recent decades due to changes in agricultural practices. The species is designated as a Species of Principal Importance, and is included on the BoCC Red List due to severe long-term decline in UK population size.
- 4.17. Two individuals were recorded on 21 May along the southern site boundary. The species was not considered to be breeding within the survey area, although habitats present provide suitable foraging opportunities for birds nesting in contiguous urban habitats.

#### ***Linnet***

- 4.18. Linnet is a widespread and numerous species in Britain, breeding in upland habitats and wintering at lower levels (such as lowland farmland). The species has undergone long-term decline in the UK breeding population size since 1969, a trend which has been reflected across Europe. As a result, Linnet is included on the UK BAP and the BoCC Red List.
- 4.19. A single individual was recorded flying over the west of the site on 21 May. Whilst suitable nesting habitat for the species was present on site, no signs of breeding activity were recorded.

#### ***Corn Bunting***

- 4.20. Corn Bunting is a formerly widespread breeding resident which has undergone a severe decline in the UK breeding population size in the long term since 1969, and more recent years. Consequently, the species is listed as a UK BAP Priority Species, and is included on the BoCC Red List.
- 4.21. A single Corn Bunting was recorded singing in the eastern meadow on site on 30 May. No further sightings of this species were made in the survey and it is concluded that no territory was present and the single sighting may have involved a transient individual.

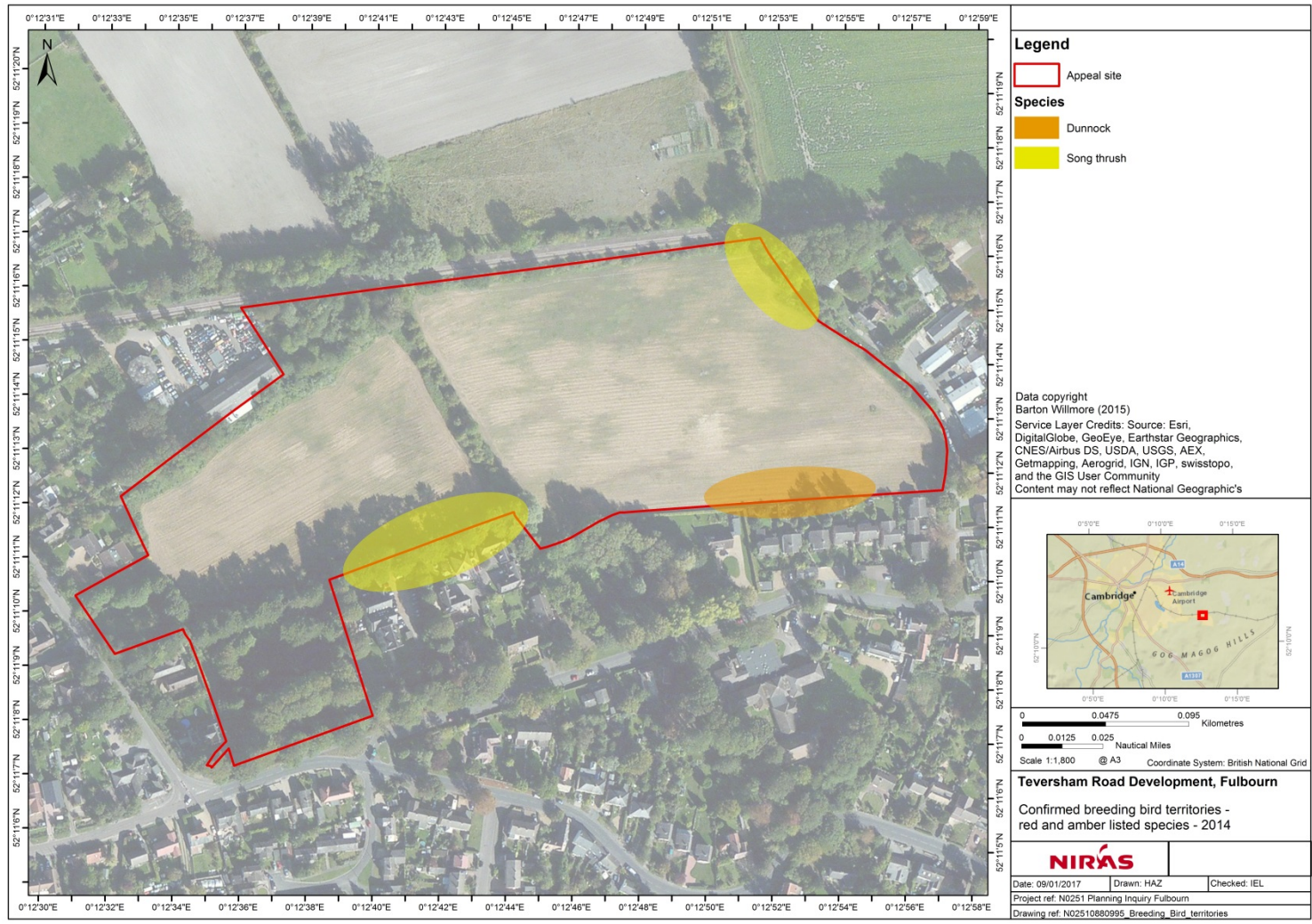


Figure 4.1: Song Thrush and Dunnock Breeding Territories at Land off Teversham Road, Fulbourn

## 5. Evaluation and Recommendations

- 5.1. The following evaluations and recommendations are based upon the evidence gathered during the Breeding Bird Survey carried out at land off Teversham Road, Fulbourn between 21 May and 30 June 2014.

### Evaluation

- 5.2. A total of thirty-two species were recorded using the site, representing a typical bird community of woodland edge habitats. Twelve of these species were considered to be breeding on the site, two of which are classified as birds of conservation concern (Song Thrush and Dunnock). An additional six species of conservation concern (House Martin, Starling, Mistle Thrush, House Sparrow, Linnets and Corn Bunting) were recorded on site but were not considered to be breeding.

### Assessment of Impacts

- 5.3. Some impacts upon the overall breeding bird community were anticipated as a result of the development. In particular, habitat clearance works during the construction phase which will affect the grassland, and to a lesser extent the woodland and hedgerow habitats, present on site have the potential to adversely affect active bird nests. Given that it is an offence under the Wildlife and Countryside Act (1981), as amended, wilfully or recklessly to damage or destroy an active birds nest or eggs, any vegetation clearance works associated with the construction of the development must be undertaken outside of the nesting bird season (i.e. between the months of September and February inclusive) in order to comply with the relevant legislation and avoid any significant adverse impacts upon nesting birds in general.

**Recommendation 1:** Vegetation clearance works should be scheduled outside the breeding bird season (i.e. during the months of September to February inclusive) to avoid the wilful or reckless damage or destruction of active bird nests or eggs.

- 5.4. Where such timing is not feasible, a nesting bird check must be undertaken by a suitably qualified ornithologist immediately prior to commencing vegetation clearance works. Any active bird nests found during this check must be protected, with a buffer of vegetation left in place around the nest for the duration of the breeding attempt. The size of this buffer will depend upon the species involved, but would typically be a ten metre radius around the nest. Any vegetation left as a buffer around active nests must be re-checked at a suitable date (depending upon the stage of the nest when found) before it can be removed during the breeding bird season (i.e. between the months of March and August inclusive).

**Recommendation 2:** Where vegetation clearance works cannot avoid the breeding bird season, a nesting bird check must be undertaken by a suitably qualified ecologist immediately prior to the commencement of such works. Any active bird nests must be protected with a buffer of vegetation until the nesting attempt is complete. Any vegetation buffers left as a result of the initial nesting bird check must be re-surveyed before removal during the breeding bird season.

- 5.5. It should be noted that the use of nesting bird checks will often lead to restrictions to construction activity, thereby potentially leading to significant delays to the development process during the breeding bird season. It is thus best avoided by undertaking vegetation clearance works outside of the breeding bird season, as outlined in Recommendation 1.

The breeding populations of Song Thrush and Dunnock on site were all found to be small i.e. 2 and 1 pairs respectively from territory mapping. These species nest in hedgerow and scrub habitats, which at the time of survey were located around the site boundaries. It is understood that these habitat features will be retained on site post-development. Therefore no significant adverse impacts are anticipated as a result of the development.

## 6. Biodiversity enhancements

- 6.1. Pursuant to the National Planning Policy Framework (NPPF) (see Appendix 1 in MKA Ecology Ltd 2014b), all planning decisions should aim to maintain and enhance, restore or add to biodiversity and geological conservation interests. The following recommendations are optional measures that could be undertaken to enhance the ornithological interests of the site in line with the policies contained within the NPPF.
- 6.2. To enhance nesting opportunities for birds at the site it is recommended that an Ecological Management Plan (EMP) is prepared for the development. The EMP should define the number, location and design of all bird nest boxes to be installed across the site. Nest boxes for a range of species (including Swift, Starling, House Sparrow and generalist species) should be considered for inclusion within the EMP.

## 7. Conclusion

- 7.1. A breeding bird survey of land off Teversham Road, Fulbourn was undertaken between 21 May and 30 June 2014. The purpose of the survey was to provide an assessment of the potential impacts of the development upon the local breeding bird community.
- 7.2. The results of the survey suggest that the site supports a bird community typical of woodland edge habitat. No significant congregations of any species of conservation concern were recorded on site during the breeding period and therefore no significant adverse impacts upon these breeding populations were predicted as a result of the proposed development, provided that the habitat types favoured as nesting locations for Song Thrush and Dunnock (in the form of hedgerows and scrub) are included within the landscaping scheme for the development.
- 7.3. Vegetation clearance works should be scheduled for outside the breeding bird season where possible, and undertaken immediately after completing a nesting bird check where unavoidable. Opportunities to enhance the value of the site for nesting birds should be incorporated within the final designs through the production of an EMP for nesting birds. In addition, native plant species should be incorporated within the planting scheme for the development in order to increase invertebrate numbers on site and thereby increase prey sources for breeding birds.

## 8. References

Bibby, C.J., Burgess, N.D., Hill, D.A. & Mustoe, S.H. (2000). *Bird Census Techniques*: 2nd edition. Academic Press, London.

British Ornithologists' Union (2013), *The British List*. Published online at <http://thebritishlist.blogspot.co.uk>

Eaton, M.A., Aebischer, N.J., Brown, A.F., Hearn, R.D., Lock, L., Musgrove, A.J., Noble, D.G., Stroud, D.A. and Gregory, R.D. (2015). *Birds of Conservation Concern 4: the population status of birds in the United Kingdom*,



Channel Islands and Isle of Man. *British Birds* 108, 708–746. Available online at [britishbirds.co.uk/wp-content/uploads/2014/07/BoCC4.pdf](http://britishbirds.co.uk/wp-content/uploads/2014/07/BoCC4.pdf)

Marchant, J.H. (1983). BTO Common Bird Census Instructions. BTO, Tring, Herts.

MKA Ecology (2014a) Land off Teversham Road, Fulbourn Phase 1 Habitat Survey and Protected Species Scoping Survey Report. MKA Ecology: Shepreth, Herts.

MKA Ecology (2014b) Land off Teversham Road, Fulbourn Breeding Bird Survey Report. MKA Ecology: Shepreth, Herts.