

A breeding bird survey of land at Sandridgebury

Ken Smith, June 2009

Introduction

In response to the plans of the Woodland Trust to create the 'Heartwood' woodland on farmland north of Sandridgebury, a baseline breeding bird survey was carried out over the whole area in 2009. Breeding birds were counted using standard methods that will be repeatable in future years as the habitats on the site are created and develop. Standard BTO/JNCC/RSPB Breeding Bird Survey (BBS) methods were used providing the potential to compare the results with those from other similar areas of land in due course. This report provides a brief summary of the results. All the raw data are provided in the accompanying spreadsheet (heartwood.xls).

Methods

The BBS (Risely *et al* 2008) is the method used for annual monitoring of common breeding birds in UK and is the major source of data for annual reports on the status of UK's birds (Anon 2008). The method involves walking transects through the land to be surveyed and recording all birds seen or heard in each 200m section. The birds are recorded in three distance bands from the transect line (0-25m, 25-100m, >100m). Birds in flight are recorded separately.

For the national BBS, transects are surveyed within randomly selected 1km squares distributed throughout the UK. For each square, a total of 10 200m sections (2km) are walked. In the case of the 'Heartwood' land, a series of transect routes running north-south were set out to cover the whole area (Figure 1). Each transect was divided into 200m sections and, to ensure independence of observations, transects were set 500m apart over the whole area. A total of six transect were walked giving a total of 34 200m sections. A full site survey took two mornings of fieldwork starting at about 7.00am and finishing by 9.00am.

Surveys were carried out in two episodes – early April (April 6 and 7) and early June (June 1 and 2) following standard recommendations for timings and methods. Surveys were only carried out in good weather conditions with good visibility and light winds.

Although the transects did pass through some of the existing woodlands on the site, additional dedicated surveys will be required to count all the birds breeding in these woods.

Results

The total counts of all birds in the two survey episodes are shown in Table 1. The species are ranked based on the counts in episode 1. The table also includes the current national status of each species as given in Birds of Conservation Concern 3 (Eaton *et al.* 2009) and whether or not the species is subject to a UK or Hertfordshire Biodiversity Action Plan.

A total of 36 species were recorded during the transect surveys. The counts vary between episodes. For two species (Fieldfare and Meadow Pipit) the birds counted in episode 1 were winter visitors which did not stay to breed on the site. The single Willow Warbler heard on episode 1 was probably a bird passing through on passage because no birds were subsequently detected in episode 2. For some other species (for instance the Dunnock) the counts vary between episodes simply because the birds are more detectable on one episode than the other. In these cases the highest count is probably the best indicator of numbers.

Of the five red listed species recorded, three (Skylark, Yellowhammer and Linnet) are open ground/farmland specialists.

References

Anon (2008). *The State of the UK's Birds 2007*. RSPB, Sandy.

Eaton M A, Brown A F, Noble D G, Hearn R, Aebischer N J, Gibbons D W, Evans A & Gregory R D (2009). Birds of Conservation Concern 3: the population status of birds in the United Kingdom, Channel Islands and the Isle of Man. *British Birds*, **102**, 296-341.

Risely K, Noble D G & Baillie S R (2008). *The Breeding Bird Survey 2007*. BTO Research Report 508, BTO, Thetford

Table 1. Overall counts of each species in episodes 1 and 2. Total counts (including birds in all distance bands and those flying over) are given and the species are ranked based on the counts in episode 1.

Species	Total count in episode 1 (April 6/7 2009)	Total count in episode 2 (June 1/2 2009)	National status of species (Red = red list. Amber = amber list of BoCC3)	BAP status
Woodpigeon	257	111		
Skylark	75	48	Red	UKBAP
Yellowhammer	21	18	Red	UKBAP
Chaffinch	20	30		
Dunnock	18	3	Amber	UKBAP
Carrion Crow	17	29		
Robin	15	10		
Fieldfare*	12	0		
Blue Tit	11	27		
Wren	8	7		
Great Tit	8	4		
Blackbird	7	11		
Great Spotted Woodpecker	7	2		
Pheasant	7	3		
Stock Dove	7	2	Amber	
Magpie	6	4		
Meadow Pipit*	6	0		
Mistle Thrush	6	0	Amber	
Green Woodpecker	5	0	Amber	
Chiffchaff	3	5		
Jay	3	0		
Buzzard	3	4		
Blackcap	2	6		
Long-tailed Tit	2	1		
Kestrel	2	2	Amber	
Willow Warbler	1	0	Amber	
Red-legged Partridge	1	5		
Song Thrush	1	4	Red	UKBAP, HertsBAP
Linnet	1	20	Red	UKBAP
Whitethroat	0	11	Amber	
Bullfinch	0	2	Red	UKBAP
Swift	0	3	Amber	
Feral Pigeon	0	1		
Greenfinch	0	1		
Goldfinch	0	1		
Jackdaw	0	3		

Figure 1. A map of the site showing the approximate locations of the transect routes. Each transect line was divided into 200m count sections.



