

Knepp Castle Estate Bird Survey

2008

By

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1.0 INTRODUCTION

A repeat though more robust survey of the breeding bird communities present within two areas of the Knepp Castle Estate was carried out in spring 2008 following similar surveys in 2005 and 2007. The purpose of this survey was to provide a comparison with the results of the previous surveys in relation to the conversion of the estate from intensive arable to a near-natural grazing system.

2.0 METHODOLOGY

2.1 Surveyor

The survey was undertaken by Paul James who also carried out the surveys in 2005 and 2007.

2.2 Field methods

As in the 2005 and 2007 surveys, two transects were surveyed: the first in the area north of the A272 and east of Shipley Road (area A) and the second in the area south of Countryman Lane and west of New Barn Farm (area B). Unlike the previous surveys (where 2 - 3 visits were made), a total of ten visits was made to each transect in the period from late March – late June. The dates on which visits were made were as follows: 27 March, 11 April, 16 April, 25 April, 1 May, 11 May, 16 May, 30 May, 13 June and 23 June. Each visit was made in good weather. The surveys were conducted by following the transects and recording the species encountered (by sight or sound) on large scale maps (see figures 1 - 4) using the standard Common Birds Census species and activity codes (Marchant 1983).

3.0 SURVEY RESULTS

3.1 Species recorded

A total of 57 species was recorded on the Estate in 2008 (see Appendix 1), 28 in area A and 41 in area B. For details of the approximate number of territories of each species recorded on each transect see Appendix 2. (Note that where a bird was recorded in the same place on more than one site visit, a single registration is shown on the map).

3.2 Species of Conservation Concern

Of the 57 species recorded during the survey, ten were Red List Species of High Conservation Concern and 15 Amber List Species of Medium Conservation Concern (see Appendix 1 for details). Red list species are those that are globally threatened according to IUCN criteria; those whose population or range has declined rapidly in recent years; and those that have declined historically and not shown a substantial recent recovery. Amber list species are those with an unfavourable conservation status in Europe; those whose population or range has declined moderately in recent years; those whose population has declined historically but made a significant recent recovery; rare breeders; and those with internationally important or localised populations. Species that fulfil none of the criteria are green listed (Gregory *et al* 2002).

4.0 DISCUSSION

4.1 Species present

The results of the survey again highlight that the estate supports a rich breeding bird community, including a significant number of species of both medium and high conservation concern. When comparing the results for 2008 with those for 2007 and 2005 it is important to emphasise that each transect was visited on ten days in 2008. This compares with three visits per transect in 2007 and two in 2005. The increased volume of fieldwork in 2008 undoubtedly accounts for the apparent increases in some of the more common species such as robin, wren and chaffinch. It would also account for the apparent increase in some of the more unobtrusive species such as dunnock and bullfinch though increases in other species such as sky lark may be due to subtle habitat changes rather than greater recording effort.

The most significant event in the 2008 survey was the discovery of two singing male wood larks holding territory in area B. Nationally the nesting habitats are varied and include farmland, recently felled forestry plantations (mainly in East Anglia) and heathland in southern England and the Suffolk coast. In Sussex however the main population has occupied the greensand of the Wealden heathlands in the northwest of the county. A healthy population has subsequently developed on heathland in Ashdown Forest further to the east and another breeding population has also been established on the South Downs close to the Hampshire border. These birds are to be found in set-aside or in fields where the previous year's furrowed areas are favoured. The colonisation of the Knepp Estate thus represents a further expansion of this red listed species within Sussex.



Plate 1. *Set-aside on the Knepp Estate where wood lark held territory in 2008.*

Although wood larks were recorded holding territory in 2008, there was no evidence of either bird being paired. It would appear therefore that the estate is still in the early stages of colonisation by this species. In order to encourage wood larks to breed, it is suggested that a number of overgrown fields are left in their current state though the provision of bare areas within the fields would further increase their suitability for wood larks.

5.0 REFERENCES

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Appendix 1 – List of species recorded on the Knepp Castle Estate, spring 2008

Species	Species code	Green listed	Amber listed	Red listed	Not classified
Greylag goose	GJ		*		
Mandarin	MN				*
Mallard	MA	*			
Grey heron	H	*			
Sparrowhawk	SH	*			
Common buzzard	BZ	*			
Kestrel	K		*		
Pheasant	PH				*
Moorhen	MH	*			
Woodcock	WK		*		
Herring gull	HG		*		
Stock dove	SD		*		
Woodpigeon	WP	*			
Turtle dove	TD			*	
Cuckoo	CU		*		
Barn owl	BO		*		
Little owl	LO				*
Tawny owl	TO	*			
Swift	SI	*			
Kingfisher	KF		*		
Green woodpecker	G		*		
Great Spotted Woodpecker	GS	*			
Wood lark	WL			*	
Sky lark	S			*	
Wren	WR	*			
Dunnock	D		*		
Robin	R	*			
Nightingale	N		*		
Blackbird	B	*			
Song thrush	ST			*	
Mistle thrush	M		*		
Whitethroat	WH	*			
Garden warbler	GW	*			
Blackcap	BC	*			
Chiffchaff	CC	*			
Willow warbler	WW		*		
Goldcrest	GC		*		
Firecrest	FC		*		
Long-tailed tit	LT	*			
Marsh tit	MT			*	
Coal tit	CT	*			
Blue tit	BT	*			
Great tit	GT	*			
Nuthatch	NH	*			
Treecreeper	TC	*			
Jay	J	*			
Magpie	MG	*			
Jackdaw	JD	*			
Carrion crow	C	*			
Starling	SG			*	
House sparrow	HS			*	
Chaffinch	CH	*			
Brambling	BL	*			
Goldfinch	GO	*			
Bullfinch	BF			*	
Yellowhammer	Y			*	
Reed bunting	RB			*	

Appendix 2 – Number of territories along each transect

Species	Species code	Area A (E. of Shipley Road)		
		2005	2007	2008
Common buzzard	BZ		1	
Kestrel	K		1	
Pheasant	PH	2		
Stock dove	SD	2	1	2
Woodpigeon	WP	1	3	
Cuckoo	CU		1	
Little owl	LO		2	2
Green woodpecker	G		1	1
Great Spotted Woodpecker	GS	1	3	3
Sky Lark	S		1	2
Pied wagtail	PW	1		
Wren	WR	11	12	21
Dunnock	D	1	3	2
Robin	R	6	8	23
Blackbird	B	5	5	2
Song thrush	ST	1	3	2
Mistle thrush	M			1
Whitethroat	WH			1
Garden warbler	GW	1	1	1
Blackcap	BC	3	5	3
Chiffchaff	CC	4	4	7
Willow warbler	WW		1	1
Goldcrest	GC	2	1	4
Long-tailed tit	LT		2	2
Marsh tit	MT	1	1	2
Coal tit	CT	1	1	3
Blue tit	BT	5	2	8
Great tit	GT	2	3	8
Nuthatch	NH	4	1	3
Treecreeper	TC		1	2
Jay	J		2	
Magpie	MG	1	2	
Carrion crow	C			1
Chaffinch	CH	6	9	13
Greenfinch	GR	1		
Goldfinch	GO		1	1
Bullfinch	BF	1		
Yellowhammer	Y	2		1

		Area B (S. of Countryman Lane)		
Species	Species code	2005	2007	2008
Canada goose	CG		1	
Mallard	MA		2	1
Common buzzard	BZ		1	1
Kestrel	K	1		
Pheasant	PH	1		
Moorhen	MH	1	2	2
Stock dove	SD	2	1	3
Woodpigeon	WP	2	2	4
Turtle dove	TD		2	2
Cuckoo	CU		2	2
Green woodpecker	G	2	4	2
Great Spotted Woodpecker	GS		2	1
Wood lark	WL			2
Sky Lark	S	2	4	9
Barn swallow	SL		1	
Pied wagtail	PW			1
Wren	WR	6	13	16
Dunnoek	D	1	6	12
Robin	R	8	5	21
Nightingale	N	1	5	4
Blackbird	B	2	4	6
Song thrush	ST	3	4	4
Mistle thrush	M			1
Reed warbler	RW			1
Lesser Whitethroat	LW			4
Whitethroat	WH	10	5	7
Garden warbler	GW	4	5	6
Blackcap	BC	4	7	9
Chiffchaff	CC	6	8	14
Long-tailed tit	LT	1	1	3
Blue tit	BT	3	5	9
Great tit	GT	2	3	10
Nuthatch	NH		2	1
Treecreeper	TC	1		1
Jay	J	2		2
Magpie	MG		1	2
Jackdaw	JD	1	1	1
Carrion crow	C			2
House sparrow	HS		1	1
Chaffinch	CH	10	12	18
Goldfinch	GO			1
Linnet	LI	1		1
Bullfinch	BF	1	1	5
Yellowhammer	Y	3	3	8
Reed bunting	RB			2

Appendix 3 – Additional species recorded

Species	Area A	Area B
Greylag goose		A pair in flight near Lower Barn on 16 May.
Grey heron		Singles near Lower Barn on 16 & 30 May.
Sparrowhawk	One on 25 April.	
Kestrel		One near Brookhouse Farm on 1 May. A pair nesting just outside the area at Blonks Farm.
Woodcock		One flushed from near Pen Bridge on 27 March.
Herring gull	Two over on 16 May.	Four over on 16 May.
Barn owl		Two flew out of nestbox to the south of Lower Barn on 27 March. No further sign of this nestbox being used during the survey. Singles hunting during daytime near Blonks on 25 April, 1 & 16 May.
Tawny owl	One in Alder Copse on 16 May. Probably breeds locally.	
Swift	Four over on 13 June.	
Kingfisher		One on the pond near Lower Barn on 27 March. One on the pond at Blonks on 16 May. Probably breeds locally.
Firecrest	One in Hartsgravel Wood on 16 May. Probably breeds locally.	
Starling		A post breeding flock of ca. 20 near Blonks on 23 June.
Brambling	One in Hartsgravel Wood on 27 March	