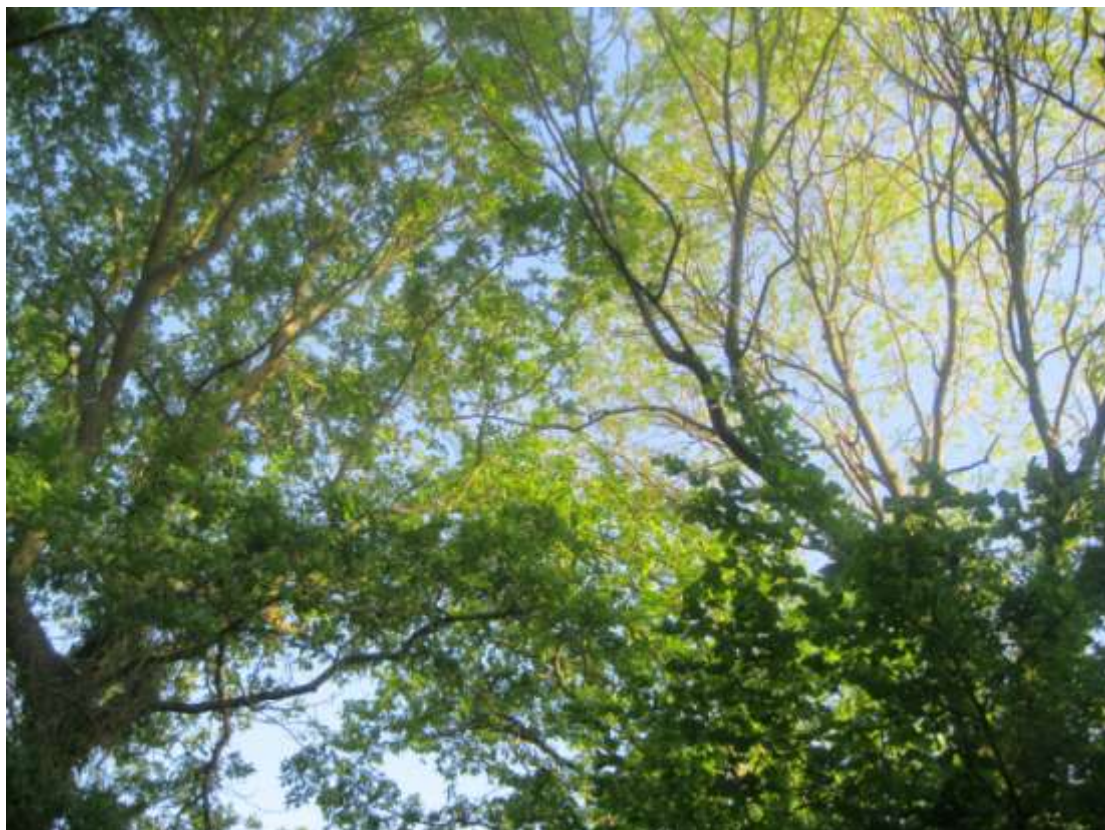


NIGHTINGALE SURVEY IN LOWER WOODS AND SURROUNDING AREA



S. J. Birks & C. Halpin

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S.J.Birks@warwick.ac.uk

claire_halpin@hotmail.com

Photo 'Dawn from my tent' Copyright S.J.Birks 2011

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1. Introduction

NIGHTINGALES IN BRITAIN: CHANGING HABITATS

“In addition to the changes in the Nightingale's range, there has been a noticeable shift in habitat use over recent decades. Once a bird of woodland, especially coppice and young plantations, Nightingales are now found predominantly in scrub with over half the singing males found in 1999 residing in such habitats.” (BTO 2011)

The nightingale's distribution, population and habitat preference in Britain is thought to be in the process of change. The last nationwide survey was carried out by the British Trust for Ornithology (BTO) in 1999, and showed that the range had contracted since the previous survey in 1980, and also that there was a shift in habitat use away from mixed woodland and active coppice and towards scrub (Wilson et al, 2002).

The last extensive survey of singing nightingales in Lower Woods, Inglestone and Hawkesbury commons and surrounding farmland was conducted six years ago by Gloucestershire Wildlife Trust (Burditt, 2005). The 2005 survey identified between ten and twelve singing birds. With these records in mind it was considered that a new survey of Lower Woods and surrounding areas would contribute valuable knowledge to these processes of population and distribution change.

THE BACKGROUND TO THE SURVEY

Inspired by a Bat Survey at Lower Woods during the late summer of 2010, some of the participants (who are also regular Lower Wood volunteers) decided to organise a Nightingale Survey along similar lines during Spring 2011.

The foremost purpose of the survey was to gather reliable data that could be compared to the 2005 survey in terms of number of singing males and territories. In addition it was thought that it would be useful to gather data on the times of day and night nightingales sing and to record singing birds to explore audio identification of individual singing males. However, the approach to the conduct of the survey was intentionally kept informal, as we wanted to encourage people to have the simple pleasure of coming along, experiencing the woods at night, and hearing the song of the nightingales.

The survey mostly brought together people who are actively involved with the Wildlife Trust conservation work in the Woods and are 'known' to each other. Surveying the nightingales also established relationships with a local farm manager Jim Clark, a professional sound recordist Gary Moore, and Andrew and Mandy who live near the Woods, and walk in the Woods most days. In fact it was Mandy who alerted us, before the survey even began, to the nightingales singing on the farmland between Lower Woods and Wickwar in the Little Avon river valley.

2. Methods

The second week in May was identified by local experts as the peak week for Nightingale 'sightings' in recent years, and therefore the survey was planned to run

between 6th May and 14th May.. The survey aimed to cover Lower Woods Nature Reserve, Inglestone and Hawkesbury Commons on foot, and surrounding farmland by negotiating access with landowners or using public footpaths.

During the week commencing 6th May, the Woods were walked systematically between 8pm and 11pm. However, the enthusiasm of the surveyors was such that observations began before the official start of the survey and was continued by some surveyors, on a less intensive level, until the end of May. The survey site was also visited at other times of the day and on five occasions overnight surveys were conducted to observe the night-time singing of the birds.

3. Results

NUMBERS AND TERRITORIES

Singing birds were found in two valleys formed by the Little Avon river and one of its tributary streams on Horwood Farm, to the west of the Woods. They delivered their song from dense thickets of hawthorn, blackthorn and bramble scrub that interlace the grassland of the farm. It was reported, by a very reliable source, that nightingales began singing in this area on the 18th April this year in these valleys, and that this has been the usual arrival date for the last three years out of five.

The survey established that birds were heard regularly in two distinct areas of Horwood Farm: the field adjacent to the Hunting Lodge, and the south slope of the Little Avon river valley. In the Hunting Lodge field, on two occasions, two individuals were heard singing simultaneously and single birds on other occasions. On the south slope of the river, on one occasion, three individuals were heard singing simultaneously and on several occasions, two were heard simultaneously.

During the survey week no Nightingales were heard singing from within the Woods or on the Commons.

The distance between the two areas where Nightingales were identified indicates that it was unlikely that there was any crossover of birds between the two. The conclusion therefore is that this survey identified five distinct singing males, although it is possible that there were more than this. All birds appeared to be singing from dense scrub dominated by hawthorn.

For details of observation dates, the time spent observing and the areas of the woodland walked, please refer to the Appendices.

THE SINGING TIMES OF THE NIGHTINGALES SURVEYED

The nightingales occupying all of these territories were heard singing at many different times of the day and night regardless of clear or cloudy skies, warm or cold nights, or the intensity of the moon-light. On four overnight visits the Little Avon valley birds sang from dusk till dawn, although, as the survey progressed the birds appeared to start singing later at night. On the final overnight visit on the 19th May, one bird that we came to call the Concrete Bridge Bird sang at dusk, ceased singing at 10.15pm for an hour and then began singing and sang until daylight began to return at about 4am.

On the night of May 6th a number of birds were observed to be singing throughout the night and some birds were also observed to be singing throughout the nights on May 12th, 14th, 18th and 20th. Other than confirming that a number of birds sang throughout the night no other discernible patterns of singing could be confirmed, although consistent night-time singing of the birds' full repertoire appeared to begin later at night as the survey continued. On the 6th May the birds began singing on 9.45pm and on 20th May consistent singing did not begin until 11.30pm.

4. Discussion

Our results support the BTO paper that Nightingale populations and habitats are changing. The number of individuals heard in this survey was 5, as opposed to the 10-12 identified in 2005, and it appears that the Nightingale population in the area surveyed no longer frequents many traditional sites that were occupied in the previous survey.

There were reports of Nightingales being heard on Inglestone Common (near Lance Coppice) before the survey began, but these could not be confirmed during the survey week. There was a confirmed 'sighting' from within the Woods (South Moon Ridings) after the survey ended; however it is not possible to say whether this was a new individual or one of the Horwood Farm birds moving territory. Certainly, one of the Nightingales on Horwood Farm was still singing throughout the night by the end of the survey week, and as it is believed that Nightingales generally only sing throughout the night whilst trying to attract a mate, it is possible that this bird had failed to pair in the one location and had moved on. Around the date that the South Moon Ridings Nightingale started singing, it was reported that the Horwood Farm birds were no longer singing, which may lend support to this theory.

In both the 2005 and 2011 surveys, identifying the exact number of singing males was problematic as the birds being monitored move around to some extent. Therefore during this survey a number of sound recordings were made and it is hoped that it will be possible to identify individual singing birds from their song when the recordings are analysed. It is also hoped that next year new recordings can be made to establish if the same birds have returned. These findings will be published in due course.

References

BTO (2011) *BTO Nightingale Appeal*. Available: <http://www.bto.org/support-us/current-appeals/nightingale-appeal> Accessed: 15th May 2011

Burditt, T (2005) *Lower Woods Nightingale Survey 2005* Available by request from the Gloucestershire Wildlife Trust

Wilson A., Henderson A.C.B., Fuller R.J. *Status of the Nightingale Luscinia megarhynchos in Britain at the end of the 20th Century with particular reference to climate change* Bird Study (2002) 49, 193–204

Appendix A: Detailed results

Date	Surveyors	Miles	Times	Areas surveyed	Grid refs.	Notes
21/04/2011	SB / CH		22.00 - 22.30	Horwood Lane		1 bird heard some distance from the bottom of Horwood Lane. Probably pheasant pen bird
01/05/2011	Dawn chorus walk		5.45 - 6.00	Margery Hay	ST7372587880	2 birds heard by concrete bridge
04/05/2011	CH	2.75	12.30 - 16.00	Plumber's Trench, Horwood Farm	ST7348087660 ST7364487898 ST7372587880	1 bird by hunting lodge; 2 singing together along track from concrete bridge
04/05/2011	CH / GM	2.14	18.00 - 22.00	Horwood Farm	ST7372587880 ST7364487898 ST7349587970	2 birds by concrete bridge; 1 next to pheasant pen
07/05/2011	SB / CH	3.3	15.00 - 18.30	Plumber's Trench, Horwood Farm, Bishop's Hill Wood, Upper & Lower Wetmoor, Horton Great Trench	ST7372587880 ST7348787608	1 bird by concrete bridge; 1 in field opposite hunting lodge
07/05/2011	CH / JR / J&J	2.83	20.00 - 22.30	The Walk, West side of Woods, Lower Wetmoor	ST7372587880	1 bird by concrete bridge
07/05/2011	MJ	4.15	20.00 - 22.30	Bay's Wood, Stonybridge Wood		
07/05/2011	SB / GM / MB	3.69	20.00 - 22.30	Horwood Great Trench, Burnt Wood, Littley, Oakhall		
07/05/2011	SB / AB	1.68		Wickwar to Sturt Bridge		
08/05/2011	CH / LH / SB	2.4	14.30 - 16.00	Littley, Hawkesbury Common, Bucklesbury Farm		
08/05/2011	CH / SB	4.24	20.00 - 23.30	Plumber's Trench, E & W Stanley, Upper Wetmoor, Burnt Wood, Horwood Farm	ST7372587880	Pheasant pen bird & 1 by concrete bridge
09/05/2011	CH	4.11	14.00 - 17.30	Plumber's Trench, Horwood Farm, Upper Wetmoor, Stony Bridge, Sturgeon, Littley, Hawkesbury Common		
09/05/2011	CH / JF / JF	0.89	20.00 - 20.30	Plumber's Trench, Margery Hay, Abram's Walk	ST7372587880 ST7364487898	2 birds by concrete bridge

09/05/2011	JF / JF		20.30 - 22.30	Littley, Lance Coppice, Inglestone Common		
09/05/2011	CH / MB	2.07	20.30 - 22.30	Horwood Farm, Bishop's Hill Wood, Bedford's Wood	ST73436 87594	2 birds on footpath in field opposite hunting lodge. 2 birds in distance from Mandy's house
10/05/2011	VP / JF	2.82	20.00 - 22.25	Lance Coppice, Assley Common		
10/05/2011	CH / SB / JR	4.19	20.00 - 23.30	Horton Great Trench, Footpaths around Horwood Farm, Shortwood Farm, Horton Great Trench from south end of NR to Lodge		
11/05/2011	GM	3.16	2.00 - 4.00	Horwood Farm		
11/05/2011	CH / SB / VP	2.94	20.00 - 23.30	Plumber's Trench, Margery Hay, Horwood Farm	ST7372587880 ST7364487898	3 birds from concrete bridge, 1 possibly pheasant pen bird
12/05/2011	SB / VP / JR	1.49	20.00 - 22.30	Plumber's Trench, Margery Hay		
12/05/2011	SB		22.30 - 8.30	Plumber's Trench, Margery Hay	ST7372587880	Started singing 21.30; full song from 23.30
13/05/2011	SB / VP	2.79	20.00 - 22.30	Horton Great Trench, Mossy Wood, Horwood Farm		
13/05/2011	SB	3.17	22.30 - 9.00	Horton Great Trench Lodge – south end		
14/05/2011	SB	1.09	12.30 - 15.30	Shepherd's Knap, River between E/W Stanley & Lower Wetmoor		
14/05/2011	SB / DC / EP	4.85	20.00 - 22.30	Lance Coppice, road along north boundary of NR, South Moon Ridings, Margery Hay, Horwood Farm		
14/05/2011	SB	1.04	22.30 - 7.30	Plumber's Trench, Margery Hay	ST7372587880	Full song from 23.00, singing all night
15/05/2011	SB	0.62	7.30 - 8.30	Plumber's Trench, Margery Hay		
	Totals	62.41				Survey effort 146 hours

Appendix B: Area covered

The following map shows the routes taken by surveyors throughout the week. Some routes were taken more than once.

