

# THE BREEDING (SONG) BIRD POPULATION OF WICKEN FEN

P.M.M. Bircham

## Introduction

All too often birdwatchers and/or ornithologists are given to making estimates of breeding numbers of birds at defined sites. Usually these estimates are extrapolated from limited small sample, casual observations leading to widely varying figures from observer to observer. Such a situation has existed at Wicken Fen for several years.

## Aim

To carry out a simple transect to mapping based study to provide some empirical data on the breeding populations of songbirds on the Fen

## Methods

Using mainly the existing pathways a route was devised to visit every part of the Fen with the exception of the relatively impenetrable western edge of compartments 1-4 and the recently acquired land at Guinea Hall Farm or Burwell Fen.

Every registration of every bird encountered (heard or seen) was recorded on one of two maps: one map of the area north of Wicken Lode and one map of the area south of Wicken Lode.

Ten counts were undertaken, a total of 37.5 hrs, between March 20<sup>th</sup> and June 23<sup>rd</sup> 2002. Eight counts took place in the morning between 7 and 11 am, two counts took place in the evening between 4 and 8 pm. Weather conditions varied from cold <10<sup>0</sup>C to warm 15-18<sup>0</sup>C. All counts took place when it was dry and although not always still, never in windy conditions.

Due to time constraints it was never possible to cover the whole area in a single visit, thus the counts were carried out in segments but usually a count would cover the whole of one 'side' of Wicken Lode.

At the end of the fieldwork the data were transposed onto single species maps and the breeding population was calculated by counting the number of territories suggested by analysis of the registrations.

## Results

The results are displayed in the table below, where column 2 shows the actual number of territories derived from the data. Column 3 shows an estimated breeding population based on an extrapolation of the density recorded in surveyed areas being applied to the unsurveyed areas, allowing for habitat type.

Species	Mapped territories	Estimated total population in prs
Turtle Dove	2	2
Winter Wren	122	150
Hedge Accentor	13	?
European Robin	125	150
Common Blackbird	66	80 – 90
Song Thrush	12	12
Sedge Warbler	45	?

<b>Eurasian Reed Warbler</b>	<b>21</b>	<b>?</b>
<b>Common Grasshopper Warbler</b>	<b>3</b>	<b>3</b>
<b>Garden Warbler</b>	<b>5</b>	<b>? 5</b>
<b>Blackcap</b>	<b>32</b>	<b>?</b>
<b>Common Whitethroat</b>	<b>10</b>	<b>? 10</b>
<b>Lesser Whitethroat</b>	<b>2</b>	<b>? 2</b>
<b>Willow Warbler</b>	<b>94</b>	<b>140</b>
<b>Common Chiffchaff</b>	<b>22</b>	<b>22</b>
<b>Blue Tit</b>	<b>14</b>	<b>?</b>
<b>Great Tit</b>	<b>5</b>	<b>?</b>
<b>Chaffinch</b>	<b>22</b>	<b>25 – 30</b>
<b>Reed Bunting</b>	<b>22</b>	<b>? 25 max</b>

In addition an estimated maximum of 4-5 Cuckoos were recorded calling, although the mobile nature of these birds makes it difficult to be certain of the exact number.

## Discussion

### Timing of visits.

Bird song is at its most intense at dawn, yet the blanket of sound makes the distinguishing of individuals less than easy, furthermore at a site such as Wicken it was not possible to be everywhere at dawn! Visits in the early morning yielded a large number of contacts, yet surprisingly some late morning or afternoon visits found many more birds singing than was anticipated. Some of these individuals were not contacted in the mornings suggesting that they were singing preferentially at other times of the day. These results suggest that to get a more complete picture it is necessary to carry out the fieldwork across a range of times of day.

### Quality of end data

The quality of the data was highly variable and it is easiest to discuss it in 'family' groupings.

Winter Wren, Hedge Accentor, Robin.

The data for the first and last of these two species seemed very robust in that registrations showed good consistency over time and repetition. The Hedge Accentor, data however, showed a lack of repeatability and it was clear that as well as being quite unobtrusive this species was an erratic singer.

Thrushes

For both Common Blackbird and Song Thrush there was excellent repeatability and the data seems very reliable.

Warblers

The data for warblers varied from good to bad. The count of Common Grasshopper Warblers seemed accurate and was confirmed by other observers. A fundamental error led to very poor quality data on Eurasian Reed Warbler and Sedge Warbler. This was due to the fact that both these species sing actively when unpaired but are mainly silent thereafter and the window of active song was missed. The numbers I recorded were clearly no reflection of the real population and it is now obvious that to census

these species would require a more intense survey over a shorter period. Blackcap proved hard to see and also were unpredictable singers, the degree of song did not seem to be correlated with any obvious parameter such as time of day or weather conditions making the results I obtained an undoubted underestimate. Garden Warbler similarly. Common and Lesser Whitethroat appeared to be much more predictable singers and the results seem to be robust not least because these birds were also more visible. The two leaf warblers Willow Warbler and Common Chiffchaff are also reliable singers and again the data seems to be robust.

#### Tits

Blue Tits are barely singers at all. A meaningful census would only be obtained by more intense observation of nesting activity. Great Tit are more active singers but perhaps not as predictable as I had anticipated thus the numbers suggested by the census seem much below true population levels and this may be due to beginning too late in the season for the peak of Great Tit song.

#### Finches

For both Chaffinch and Reed Bunting the data seem good. Both were reliable singers and found with good repeatability.

#### **Conclusion**

Results suggest the reliable data reveals the following breeding numbers: Winter Wren 150 prs, Robin 150prs, Common Blackbird 80-90 prs, Song Thrush 12prs, Common Grasshopper Warbler 3prs, Common Whitethroat 10 prs, Lesser Whitethroat 2ps, Willow Warbler 140 prs, Common Chiffchaff 22 prs, Chaffinch 25-30 prs, Reed Bunting 22-25 prs.

For all other species the data are not robust enough, or reliable enough to make any meaningful population estimate.

The methodology enabled me to fulfil part of my aim only. About half of the common breeding birds were monitored successfully but for various reasons already discussed many of the species that breed in significant numbers were not censused adequately. It is clear that in order to obtain quality information on some species a more flexible approach to censusing is required.