

# Cheshire Barn Owl report 2007

## Introduction

This report collates data from the Wirral, Mid Cheshire, South Cheshire and West Cheshire Barn owl groups. For the first time data from North Cheshire, North East Cheshire and East Cheshire groups is reported separately from the Mid Cheshire data. Also for the first time we have Cheshire data reported by the Greater Manchester County Bird recorder from the extreme north of the county.

## Summary

There were 156 successful breeding sites of Barn owls in Cheshire with a total of 651 confirmed young. (There were an additional 6 nest sites where eggs were laid and then subsequently abandoned). The number of confirmed young includes a small number (15) which were hatched but subsequently died. At 6 of the 156 sites the young were not counted and are not included within the 651. Using the average number of young per pair at the counted sites gives an estimated total of 670 young. It is also worth noting that 24 of the reported total breeding sites were found late on in the year., indeed the Wirral reported chicks too young to ring at the end of November. It is likely that most or all of these were second broods, which was confirmed in some cases where the female was trapped at the nest site both in the spring and again later in the year.

## Data

<b>Total number of confirmed breeding sites</b>	<b>162</b>
<b>Total no. of successful breeding sites</b>	<b>156</b>
<b>Total no. of counted young</b>	<b>651</b>
<b>Average young per pair of the 156</b>	<b>4.3</b>
<b>Estimated total young</b>	<b>670</b>
<b>Boxes installed</b>	<b>864</b>

## Detailed data

Group	Breeding Sites	Successful sites	Counted sites	Counted young	Ringed Young	Second broods	Young Per pair
G M/C	3	3	3	7	0		2.3
Mid	39	34	30	145	130	7	4.9
North	5	5	4	16	3		4.0
North E	16	16	15	57	48	3	3.8
South	10	10	10	56	51		5.6
East	2	2	2	6	2	1	3.0
Wirral	34	33	33	149	133	3	4.5
West	53	53	53	215	204	10	4.1
<b>Totals</b>	<b>162</b>	<b>156</b>	<b>150</b>	<b>651</b>	<b>571</b>	<b>24</b>	<b>4.3</b>

Note : Where second broods occur even if at the same site as the first brood this is counted as two sites in the breeding sites total. Only one of the West second broods was at the same location as the first, as was one of the Wirral's. In most cases the same female was involved at another adjacent location.

The reasons for differences between the counted young and the ringed young vary. Wirral were able to count the number of chicks hatched (149). The other groups were not.. The other groups probably also lost chicks before they were counted. Some groups were able to count young at some sites but were not able to ring them, which is the reason for the difference. Also there were some sites where some of the young were too young to ring –4 young in total.

Table3 below accounts for the differences

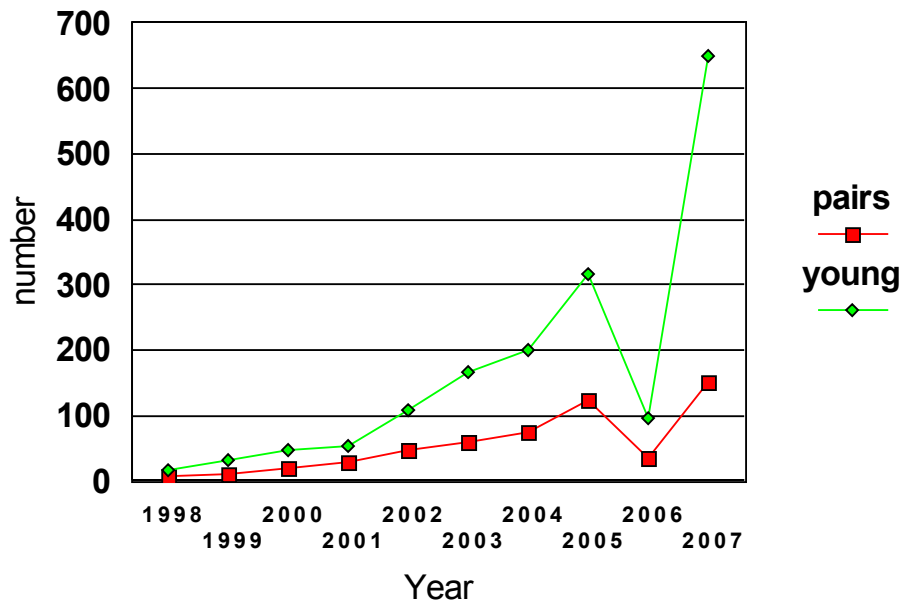
Table 3

Group	Sites with Abandoned eggs	Young hatched	Chicks too young to ring	Chicks Not ringed (inaccessible)	Chicks died or fledged before ringing	Total Counted but not ringed
GMR	0	Unknown		7		7
Mid	5	Unknown	3	10	2	15
North	0	Unknown		13		13
North E	0	Unknown		7	2	9
South	0	Unknown		5		5
East	0	Unknown		4		4
Wirral	1	149	1		15	16
West	1	Unknown	0	11		11
<b>Totals</b>	<b>7</b>		<b>4</b>	<b>52</b>	<b>19</b>	<b>80</b>

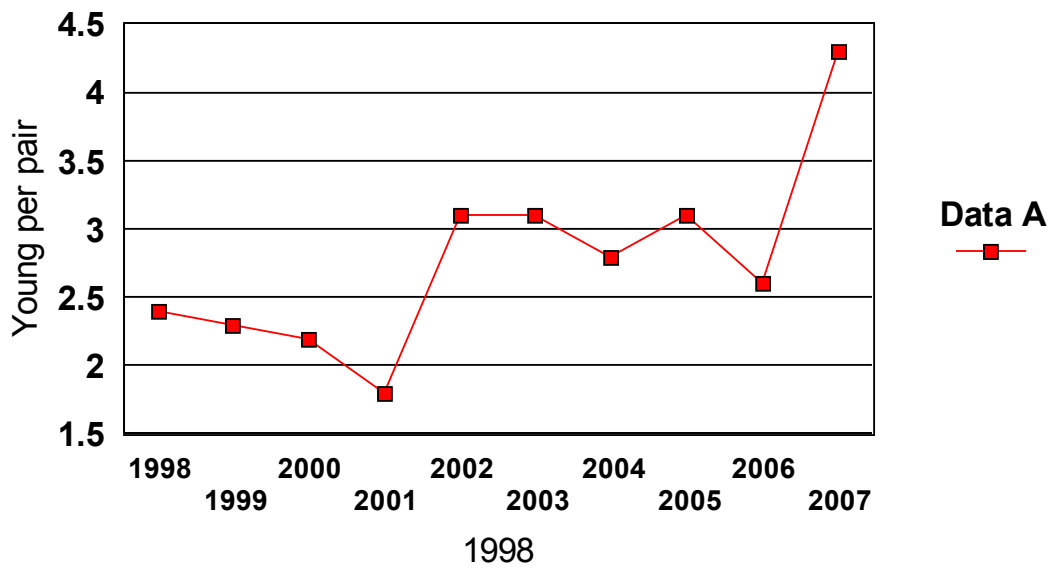
Note one of the above columns refers to those chicks which were counted and then died or fledged before ringing. In reality there were probably far more in this category, which were not counted before they died or fledged.

Year	Breeding Pairs	Young	Young per pair
1998	7	17	2.4
1999	10	32	2.3
2000	19	46	2.2
2001	29	53	1.8
2002	48	110	3.1
2003	61	167	3.1
2004	76	199	2.8
2005	123	316	3.1
2006	36	96	2.7
2007	151	651	4.3

## Barn Owl breeding data 2007



## Young per pair vs year



## Location of Breeding Sites

<i>Location</i>	<i>Tree Box</i>	<i>Barn /Barn box</i>	<i>Pole box</i>	<i>Building</i>	<i>Natural tree site</i>	<i>Total</i>
<b>G M/c</b>		3				3
<b>Mid</b>	35	1	1		2	39
<b>North</b>	3		2			5
<b>North E</b>	12				4	16
<b>South</b>	6	1	3			10
<b>East</b>	1				1	2
<b>Wirral</b>	11	4	10	1	4	30+4 <sup>note</sup>
<b>West</b>	6	1	41		5	53
<b>Totals</b>	74	10	57	1	16	162

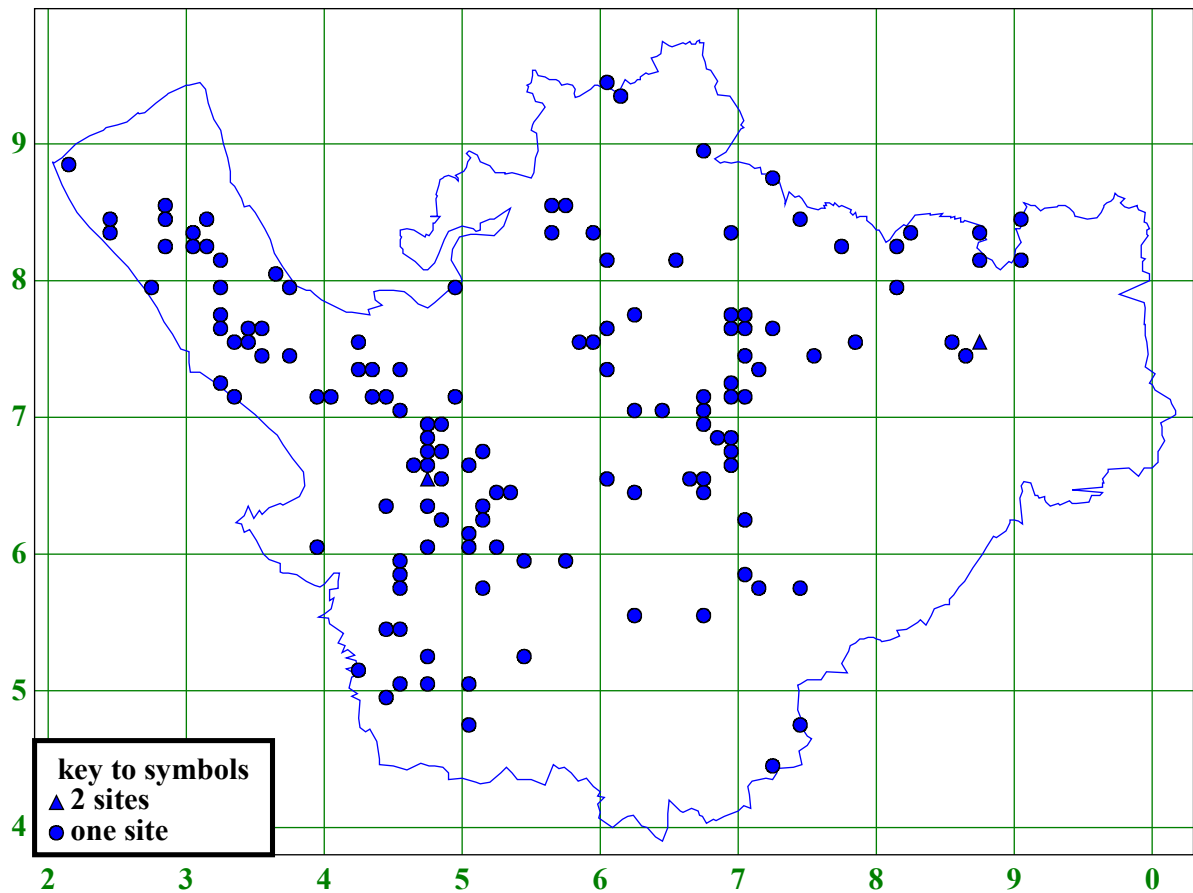
Note this report adds 3 sites for the Wirral's second broods plus one where abandoned eggs were found.

## Box utilisation

<i>Location</i>	<i>Total boxes</i>	<i>Boxes used</i>	<i>% Utilisation</i>
<b>G M/c</b>	unknown		
<b>Mid</b>	253	37	14.6
<b>North</b>	26	5	19.2
<b>North E</b>	62	12	19.4
<b>South</b>	68	9	13.2

East	12	1	8.3
Wirral	146	34	23.2
West	297	53	17.8
Totals	864	151	17.5

### Barn Owl total breeding sites 2007



### Discussion

Following the very poor year in 2006, 2007 showed another increase in the numbers of breeding pairs of Barn Owls that were detected in Cheshire. Some of this can be ascribed to an increasing coverage by Barn Owl groups particularly in the east and North of the county. A further element in the increase in breeding pairs was the significant increase in second broods detected. It is only in the past two years that most groups have attempted to detect these. In fact if these are subtracted from the total there has been hardly any increase in the total number of pairs since 2005. Indeed all the breeding pair totals pre 2005 may have been underestimated by 10-15%.

Data from future years will help to clarify this. Although it is likely that the proportion of second broods was increased by the good food supply in 2007.

The most important feature of 2007 was the major increase in the young per pair which was observed. The increase in breeding pairs over the last good year in 2005 was around 50% but the increase in numbers of young fledged was around 100% which was largely due to the substantial increase in young per pair. At 4.3 this is well above the replacement rate quoted by Shawyer and must represent a major increase in food supply following the very poor year in 2006. Very high peaks of productivity have been mentioned by Shawyer. These took place in 1943 and 1972.

The young per pair values for the individual barn owl groups may possibly represent the quality of the habitat in each area. Certainly the south Cheshire group which has the highest young per pair has some of the best habitat in the county.

Little significance should be attached to table 3 as it is simply an attempt to explain the differences in the data.

Tree boxes appear to be more popular than pole boxes but this may simply reflect the higher number of tree boxes provided. In the West, where pole boxes are in the majority they are the most popular sites.

The map of sites is now proving more useful as coverage of the county increases. There are clear Gaps in centres of population like Birkenhead, Chester and Northwich. (Should we try a few urban boxes?).

There are also gaps in the hill country in the centre and east of the county. This reflects the attempts of the groups to focus on low-lying areas which are favoured by this species. With the warmer climate should we be neglecting these areas.

Finally the ringing data available shows about 50% of the adults trapped in the West Cheshire area were unringed. This probably reflects a significant number of birds which were raised in natural sites which were undetected.

Some of them may have been part of second broods which the group were not looking for in earlier years.