

Cheshire Barn Owl report 2008

Introduction

This report collates Data from the Wirral and the Mid, South, West, North and North East Cheshire Barn Owl groups. There is no data this year from East Cheshire nor from the Manchester Recorder.

Summary

There were 59 successful pairs of breeding Barn owls in Cheshire in 2008 with 135 confirmed young. There was one confirmed breeding pair where the young were not counted giving an estimated total young of 137. No second broods were reported this year.

Total number of confirmed breeding pairs	78
Total successful breeding pairs	59
Total counted young	135
Average young per pair	2.3
Estimated total young	137
Boxes installed	1061

Note : At only one confirmed breeding site was the number of young not counted. Sites where eggs were found but young not confirmed are **not** included within the Successful breeding sites total.

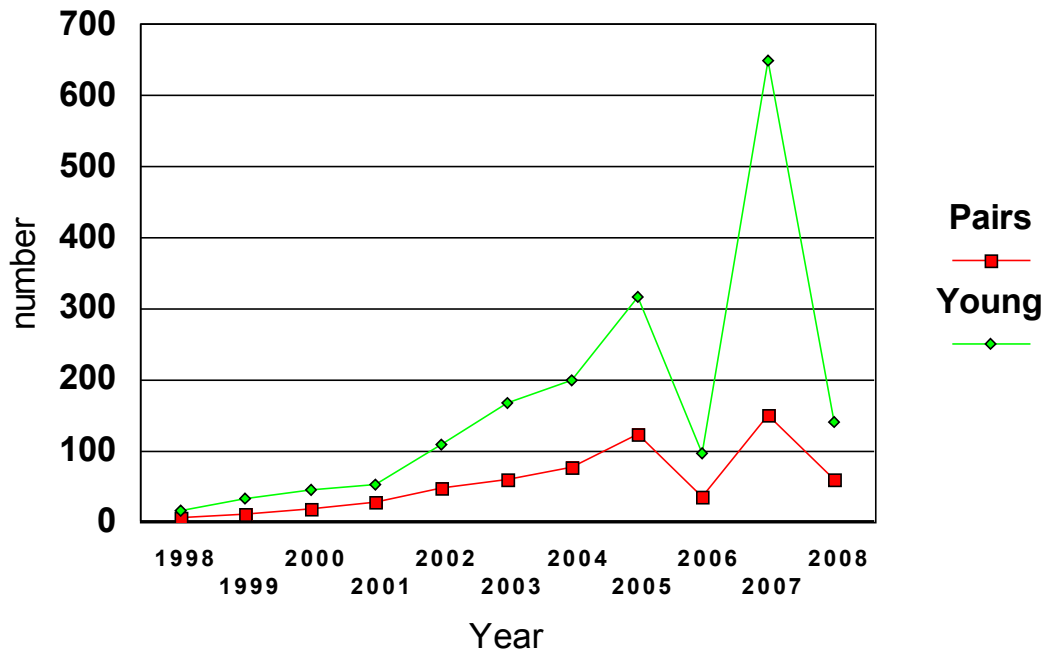
<i>Group</i>	<i>Breeding sites</i>	<i>Successful Sites</i>	<i>Counted sites++</i>	<i>Counted young</i>	<i>Ringed young</i>	<i>Second broods</i>	<i>Young per pair</i>
<i>Mid</i>	13	11	10	20	20	0	2.0
<i>North</i>	1	1	1	2	2	0	2.0
<i>N/E</i>	2	0	0	0	0	0	
<i>South</i>	8	6	6	15	15	0	2.5
<i>Wirral</i>	25	12	12	38	33	0	3.2
<i>West</i>	29	29	29	60	60	0	2.1
Total	78	59	58	135	130	0	2.3

++Counted sites are sites where young were counted.

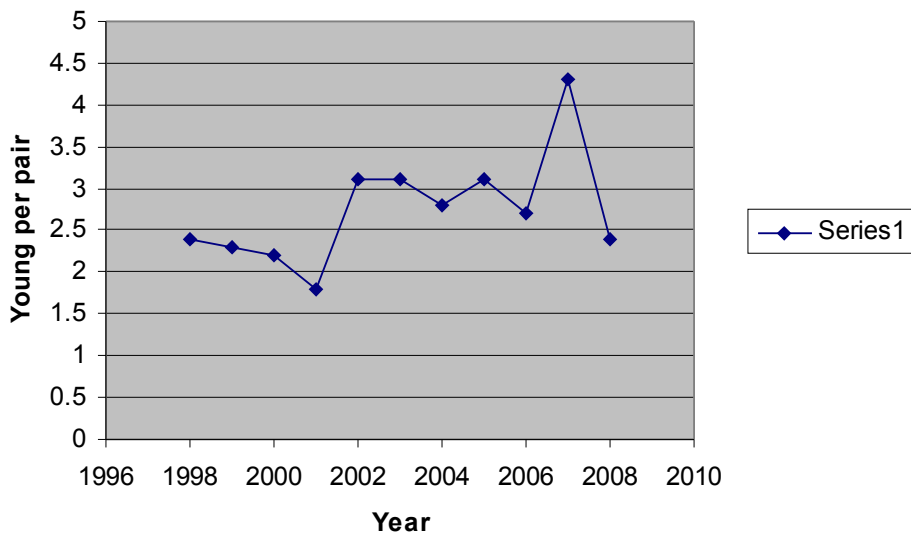
Wirral have a good estimate of the presence of a pair prior to breeding. Most other groups haven't so their number of initially occupied sites is far higher than shown for the other groups.

<i>Year</i>	<i>Breeding Pairs</i>	<i>Young</i>	<i>Young per pair</i>
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
2008	59	141	2.3

Breeding Data 2008



Young per pair vs year



Location of nest sites

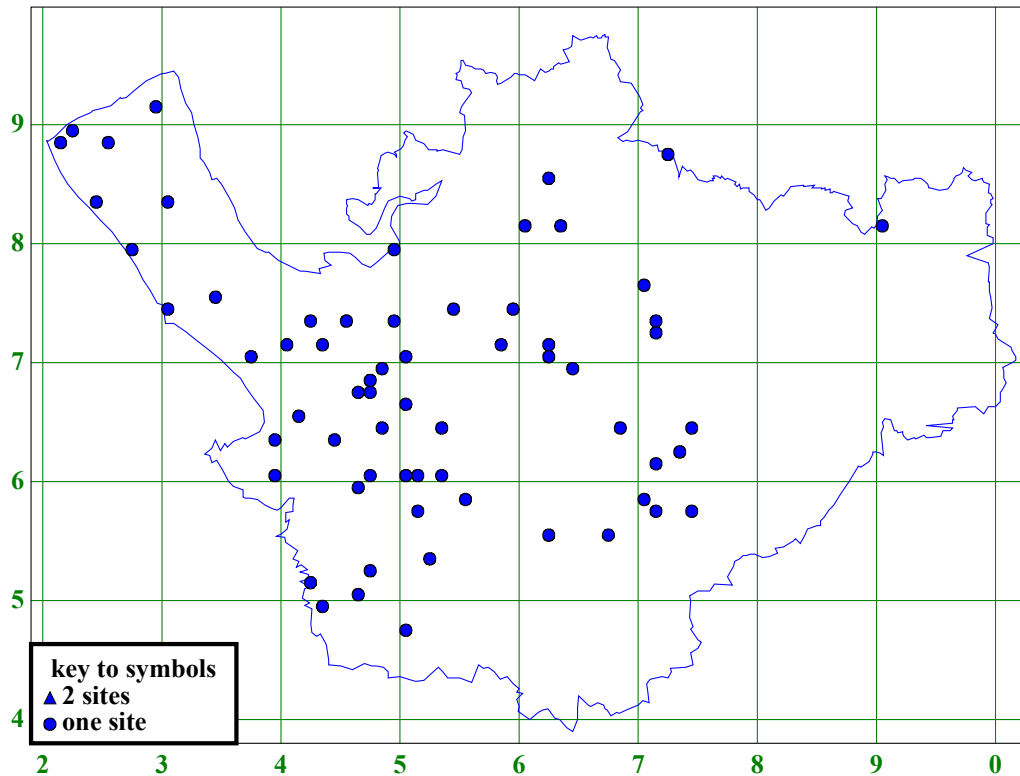
	<i>Tree box</i>	<i>Barn box</i>	<i>Pole box</i>	<i>Building</i>	<i>Natural Tree site</i>	<i>Total</i>
<i>Mid</i>	12	0		1	0	13
<i>North</i>				1		1
<i>N/E</i>	1				1	2
<i>South</i>	4		4			8
<i>Wirral</i>	7	4	12		2	25
<i>West</i>		1	25		3	29
<i>Total</i>	24	5	42	1	7	78

Note: this table refers to all nest sites not just the successful sites

Box Utilisation

	<i>Total boxes</i>	<i>Boxes used</i>	<i>% Utilisation</i>
<i>Mid+east+N/E+south+north</i>	575	23	4.2
<i>West</i>	326	26	9.1
<i>Wirral</i>	160	23	23.5
<i>Totals</i>	1061	78	7.35

Barn Owl Location of successful breeding sites in 2008



Discussion

This has not been a good year for Barn Owl breeding success. The number of pairs is higher than in the last bad year which was 2006. (59 pairs in 2008 vs 36 in 2006). However, the young per pair was only 2.3 vs. 2.7 in 2006. This is well below the required replacement rate.

The poor productivity and reduction in breeding pairs compared with 2007 and 2005 is difficult to understand. Poor breeding performance is normally ascribed to a low point in the vole cycle. If the peak was in 2007, then, if the cycle is 4 years, we should not have reached the low point in 2008. We need a lot more data to even try to understand what has happened; perhaps it was a combination of some reduction in voles plus a cold wet spring and summer.

Following a suggestion from A McCleary I have plotted the temperature at Shawbury (the nearest site for which there is data) on the same graph as the productivity data—see below. It is clear that the excellent performance in 2007 followed the warmest April for many years. Also, the poor performances in 2001 and 2006 followed cold April weather. So perhaps we should be looking at April temperature combined with the vole cycle to interpret breeding success. The plot of young per pair vs temperature shows a correlation which is remarkably good. It appears that a good year should follow average temperatures above 14deg c. and a poor one below 12deg c.

Evidence suggests that there was a considerable number of non-breeding adults in the county and given better conditions in 2009 we can expect a much-improved breeding performance.

Acknowledgements

The author would like to thank Bernard Wright and Alastair McCreary from the West Cheshire(Broxton) group , Mike Maher from the Wirral group and John Mycock from the Mid Cheshire Group(who collates data from Mid , South, North and East Cheshire groups) for providing the data for this and previous reports .Also the volunteers from all groups without whom there would be no report and far fewer Barn Owls breeding in our county.

