

Cheshire Barn Owl Report 2010

Introduction

This report collates data from the Wirral and the Mid, South, West, North, East and North East Cheshire Barn Owl groups.

Summary

The groups discovered 132 breeding pairs of Barn owls in Cheshire this year. (Please note that I have assumed breeding where chicks were observed or ringed, where only dead chicks were found, where only eggs were found or where "failed brood" was reported). The number of successful breeding pairs was 111. Successful pairs were those where chicks were ringed or where mature chicks were observed. I have also included those reports of "birds already fledged" within the successful pairs.

Total successful pairs	111
Sites with unhatched eggs	12
Failed brood	8
All chicks dead	1
Total breeding pairs	132
Total counted young	260
Young per pair	1.96
Boxes installed	1297

Group	Breeding sites	Successful Sites	Counted sites++	Counted Young +	Ringed young	Second broods	Young per pair
Mid	32	25	25	57	50	0	1.78
North	6	4	3	6	6	0	1.00
N/E	4	3	2	6	3	0	1.5
South	20	19	16	35	32	0	1.6
Wirral	19	17	17	48	40	0	2.5
West	50	42	42	107	107	0	2.14
East	1	1	1	1	1	0	1
Total	132	111	107	260	239	0	1.96

+ = live young

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	2.4
2002	48	110	2.3
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
2009	141	430	3.0
2010	132	260	1.96

	Tree box	Barn box	Pole box	Building	Natural	Total
Mid	28	0	1	1	2	32
North	4		1	1		6
East	1			1		1
N/E	4					4
South	14		4		2	20
Wirral	8		7	4		19
West	4	1	42		3	50
Total	63	1	55	7	7	132

Location of nest sites

Box Utilisation

	Total boxes	Boxes used	% Utilisation
Mid	430	32	7
East	47	1	2
North	48	6	12
North East	107	4	4
South	113	20	18
West	355	50	14
Wirral	197	19	10
Totals	1297	132	11

Discussion

2010 was not a good year for breeding Barn owls in Cheshire .The number of pairs breeding was 132 which is about 10% down on the previous year. This may reflect the conditions in the previous winter (2009-10) which were quite severe .This was the first winter for many years where snow lay for significant periods and it appears that this gave rise to some adult mortality. The number of breeding pairs actually increased in 2 areas but in at least one of these this is a reflection of increased activity from that group.

In addition to the reduction in breeding pairs, many birds had difficulties during the breeding season.12 sites had unhatched eggs , 8 had totally failed broods and in many sites many of the hatched young died which resulted in the young per pair falling to its lowest level ever. The timing of egg laying was also very variable .There has been much speculation within the groups as to the cause of this.It appears that there was an adequate food supply at the time of egg laying but this was interrupted part way through the breeding season.. The spring was dry and maybe the vole population fell during June when the maximum feeding rate was required. It may simply be a reflection of the familiar “4 year vole cycle “. However it would require an extreme stretch of the imagination to see a four year cycle in the graphs of young per year and young per pair vs. year shown above. It appears to be closer to a 2year cycle.

We were hoping to get more information on prey availability from the video monitoring of a breeding pair at Broxton .Unfortunately one of the pair was killed and the eggs did not hatch.

I have tried to correlate young per pair with daily average April temperature at Shawbury in previous years. This year the correlation is very poor with a high temperature of 14.0 and a very low young per pair..

Finally, the recovery of adults in nest boxes in the west group area shows that 30% were unringed ,suggesting that there is still a substantial breeding population which remains undetected although this proportion seems to be declining.

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J D Wild January 2011