

# **Cheshire Barn Owl Report**

# **2002**

## 1 Introduction

This report collates data from the Broxton (west), Mid Cheshire, South Cheshire and Wirral Barn Owl groups. There is no data from the East of the county where such groups do not exist. Records of Barn Owl breeding data are presented.

## 2 Summary

There were 48 confirmed breeding pairs in Cheshire in 2002 with a total of 110 confirmed young .At thirteen of these sites the young were not counted. Using the average chicks per pair at the sites where the young were counted of 3.14 would give a an estimated total of 150 young. The maximum number of young produced was 6 on one site.

The number of boxes now installed in Cheshire is approximately 245 , with 27 of these being used for breeding in 2002.

There are 4 established Barn owl groups in Cheshire with a total of 74 members and 20 active volunteers.

The number of detected breeding pairs has increased substantially yet again .It is difficult to ascertain whether this reflects a genuine increase in the total population or a shift of birds to nest boxes from other sites. It is most likely that the boxes have provided extra breeding sites and that there is a genuine increase in the total population.

## Data

Breeding data for 2002

No of confirmed breeding pairs	48
No of breeding pairs with confirmed numbers of young	35
Average Young per pair (of the 35)	3.14
Confirmed young owls	110
Maximum no of young at one site	6
Estimated total young	150
Boxes installed	165

## Comparison with previous years

Year	Breeding pairs	Young	Fledglings	Mean flgs	Mortality
1998	7	17	17	2.4	0
1999	10	32	23	2.3	9
2000	19	46	44	2.2	2
2001	29	53	53	1.8	6
2002	48	110	?	2.6	?

The locations of the breeding sites are summarised below.

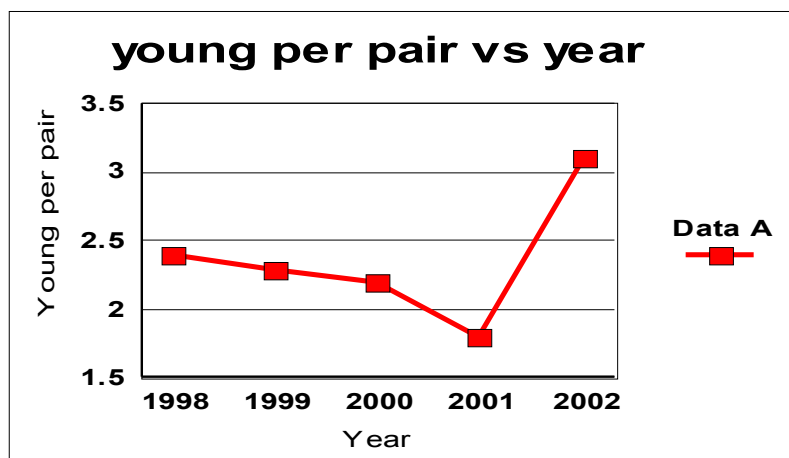
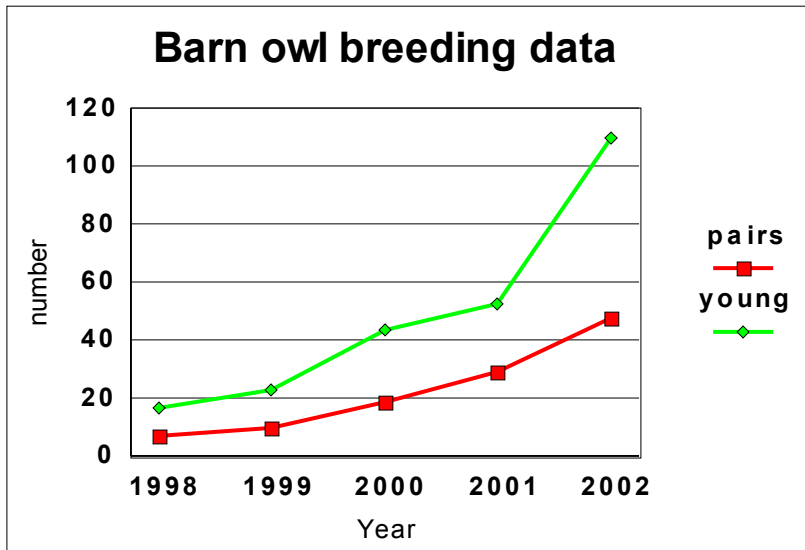
	Tree box	Barn box	Pole box	Building	Tree site	Total
West	6	1	10		9	26
Mid	1			4	2	7
Wirral	3	4		3	1	11
South			2		2	4
Total	10	5	12	7	14	48
%	20	10	25	14	31	100

The number of boxes installed and the take up of boxes by Barn owls is shown below

	Boxes installed	Used by barn owl	%
West	111	17	15
Mid	54	1	2
Wirral	60	7	11
South	20	2	10
total	245	27	11

Blanks in above table indicate no data received

Graphs of the number of confirmed breeding pairs vs time. no of young vs time ,no of young per pair vs time are shown below

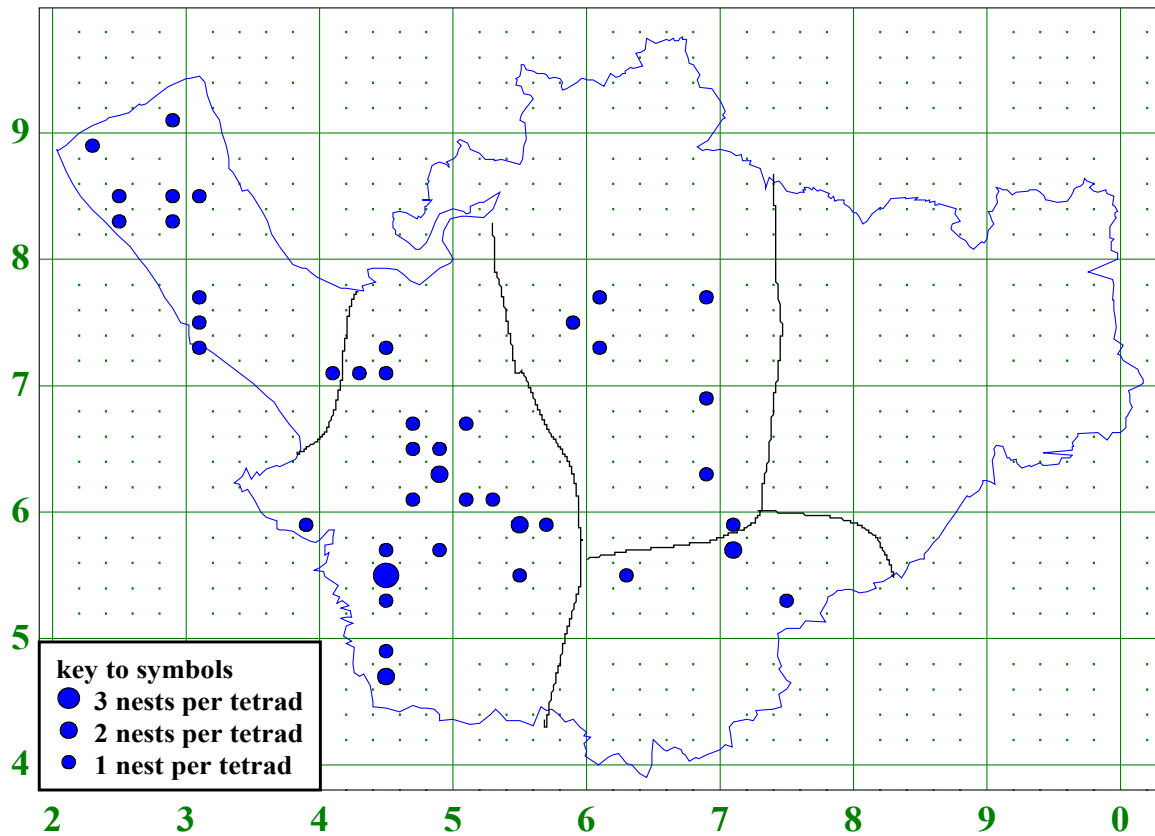


Note that the young per pair figure is far higher than in previous years. This reflects a new and more realistic method of calculation where the number of young is divided by the number of sites where the young were counted and not the total number of sites as previously. The figure of 3.14 is very close to the national average quoted by Shawyer and is above the value of 3 required to sustain the population

**Distribution**

For the first time a distribution map of known breeding sites has been produced

# Tyto alba Cheshire 2002



## Discussion

The number of confirmed breeding pairs has again increased from 29 in 2001 to 48 in 2002. These were distributed as follows: Wirral 11 pairs, Mid Cheshire 7 pairs, West 26 pairs, South 4 pairs.

The number of young produced was 110 confirmed and 150 estimated – the difference being due to the inaccessibility of a few – mainly natural nest sites where for example the nest was at the base of a large hole in a tree and the young could not be counted. Also in two areas data was only reported on breeding pairs and no attempt was made to count the young. The average breeding success per pair was 3.14 chicks. The number of chicks per pair which actually left the nest is unknown but is likely to be similar to the above figure as ringing and counting of chicks was carried out late in the season when the chicks were well developed.

The year on year increase in the number of known breeding pairs is very welcome. However the data does not allow any certain explanation of the reasons for this. Where the adults have been recovered at the nest site during ringing very few ringed adults have been found at nest boxes which suggests that, in certain areas, a substantial undetected population, mainly in natural sites, must exist. Young or adults from these sites have occupied some boxes particularly in the west of the county. Whether this has resulted from a direct transfer of a breeding pair to a box or whether an additional site has been provided for young from the undetected population is uncertain. It is likely that additional nest sites have been provided and that the total population has increased as a result of nest box installation. It is notable however that the take up of boxes in Mid – Cheshire is much lower than in the West this may reflect a smaller undetected population in the centre of the county where there may be less suitable habitat.

The distribution map is hopefully of interest but again it is difficult to draw any firm conclusions from it. The high concentration in the west probably reflects a combination of a very active barn owl group plus suitable habitat and overall a much less urban environment than in other parts of the county. The absence of any data from the east is glaringly obvious and suggests a major effort to set up a barn owl group in that area would significantly advance the understanding and conservation of this species in our county.