



Barn Owls of South West Cumbria Monitoring Report 2014



By
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Introduction

This report contains information on the status of 42 Barn Owl sites checked across the South West monitoring area of Cumbria. This area was set out in the 2003 monitoring amendments to the county by the Cumbrian Raptor Study group. The sites were chosen in location clusters, out of a list of over 180. Some of these are historic sites, or roost sites only, but were still monitored due to a chance of re-colonisation.

Total number of sites checked

Out of the 42 sites checked, Barn Owls made a breeding attempt at **17** (41%)

All **17** pairs that attempted to breed were successful, with a total of **62** young (average fledged per nest 3.64)

1 site was used as a roost only by Barn Owls

5 used by other species (2 Kestrels, 1 Tawny Owl, 1 Little Owl, 1 Jackdaw)

19 sites were empty

20 Baseline Sites

Every season the same 20 sites are used as baseline data to compare year on year. However the baseline sites have changed for 2014. All supplementary fed sites have been removed from the list to give a better representation of what the wild Barn Owl population is doing. Some sites had also become inaccessible and therefore have been removed.

Baseline Results

Breeding attempt made at **6** sites (30%), **6** pairs were observed to have a total of **22** young (average fledged per nest 3.6)

Type of nest site

Out of the 42 sites checked there are:

9 external boxes

27 internal boxes

6 natural nest sites, which are not manmade boxes

No natural tree cavity nest sites.

Method

The method the Trust adopts is to do two visits to each nest site. The first being late April/early May and is usually based on reports of activity from property owners or monitoring volunteers. The purpose is to establish occupancy of a site and clutch size if it is found to be occupied by Barn Owls. The second visit in June/July/August is to ascertain numbers hatched and to ring the chicks.

Results

The results shown in charts 1 and 2 include sites where a pair of Barn Owls was present, including those sites where the pair was unsuccessful in rearing young. This excludes sites which were unoccupied, used as roosts or used by other species.

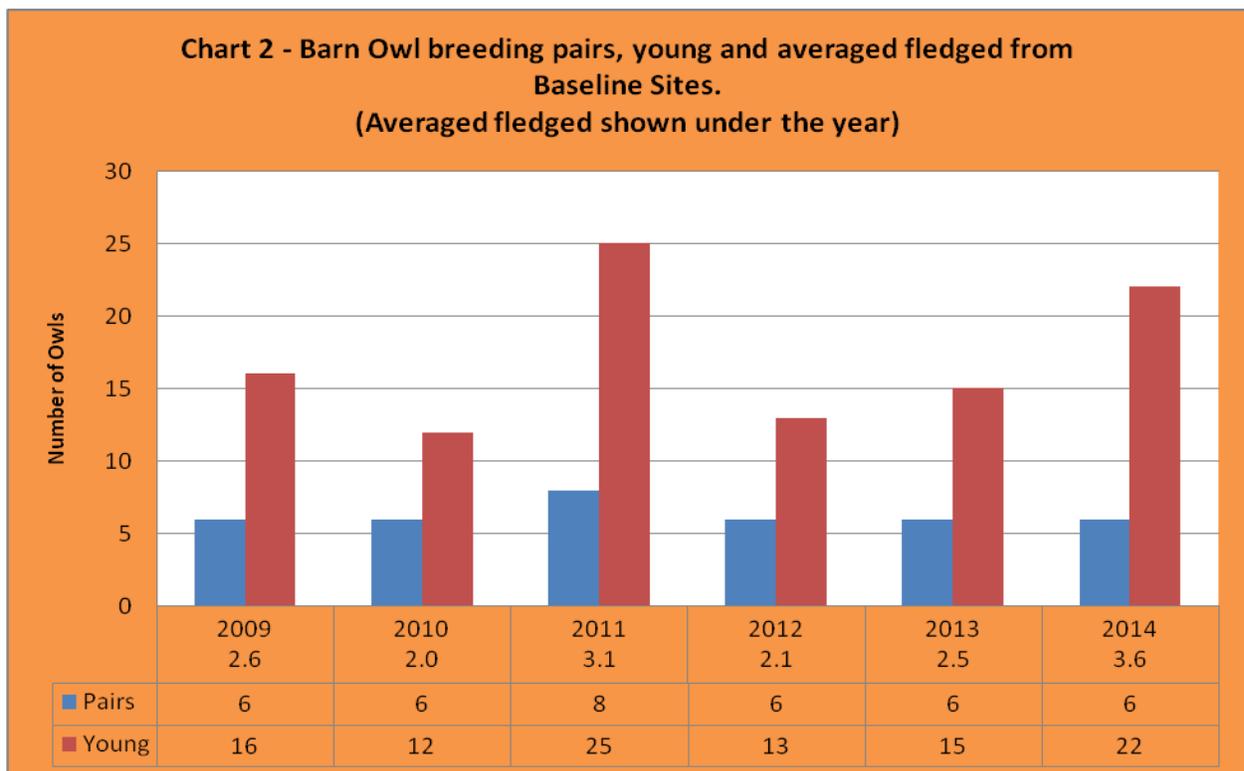
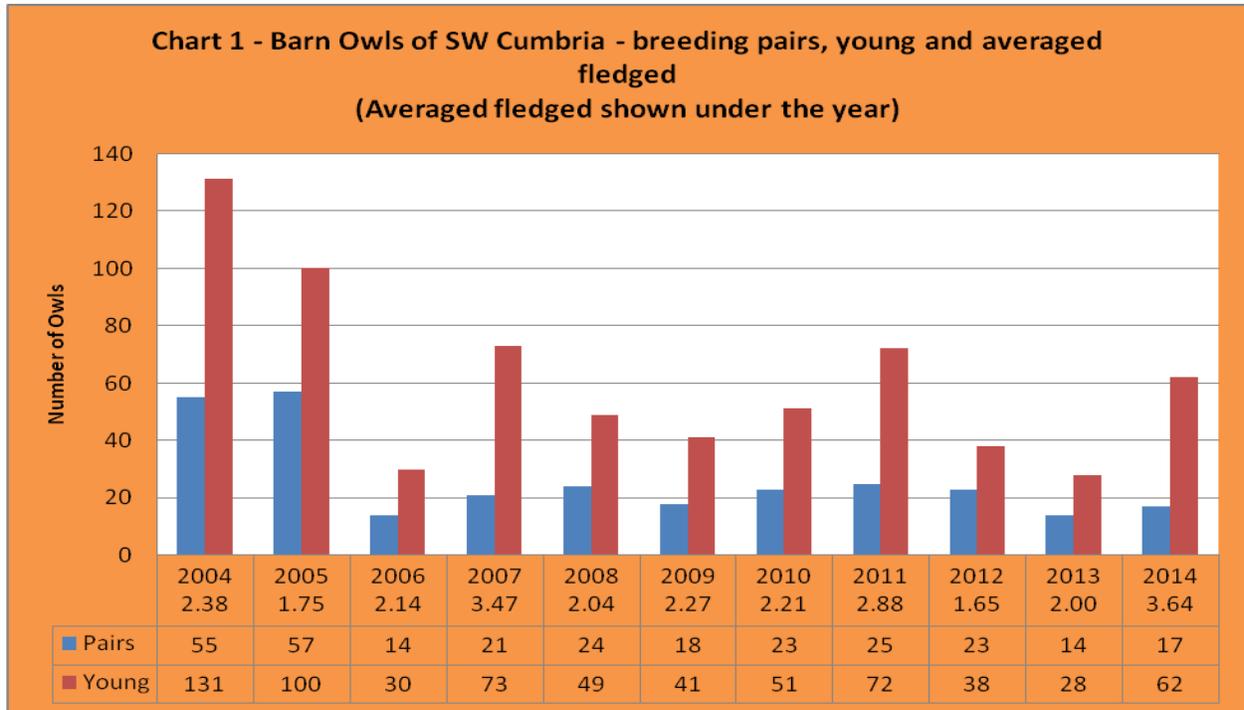
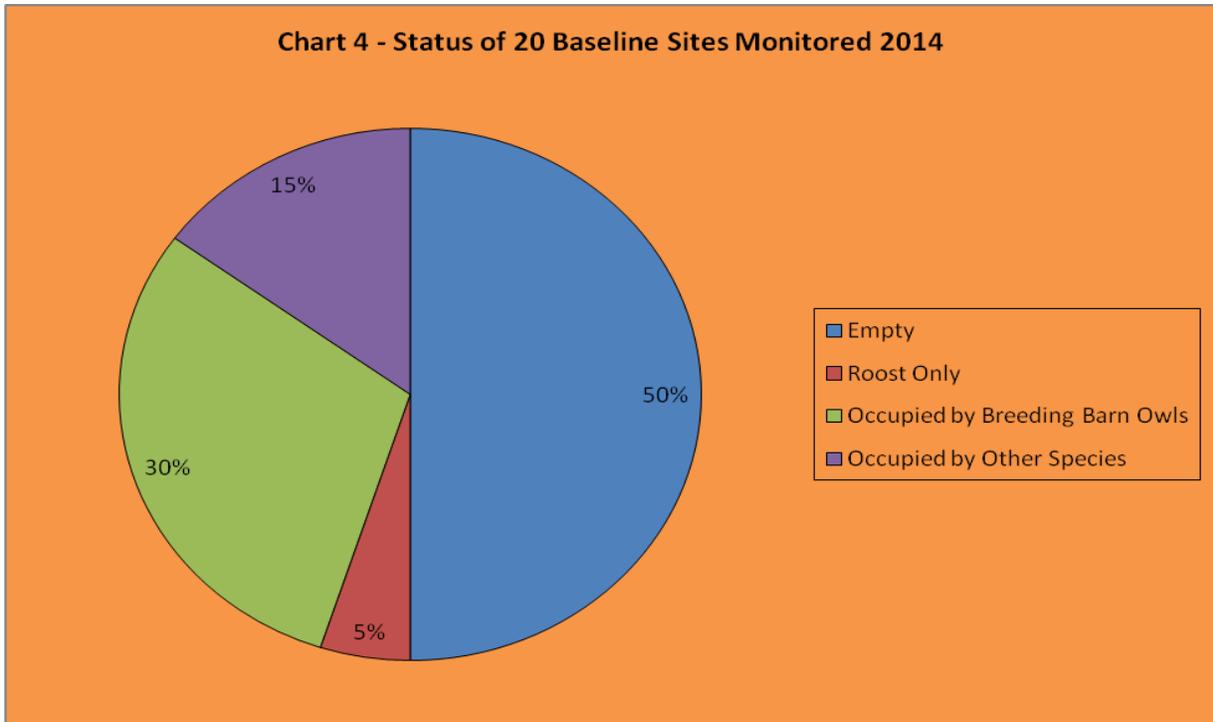
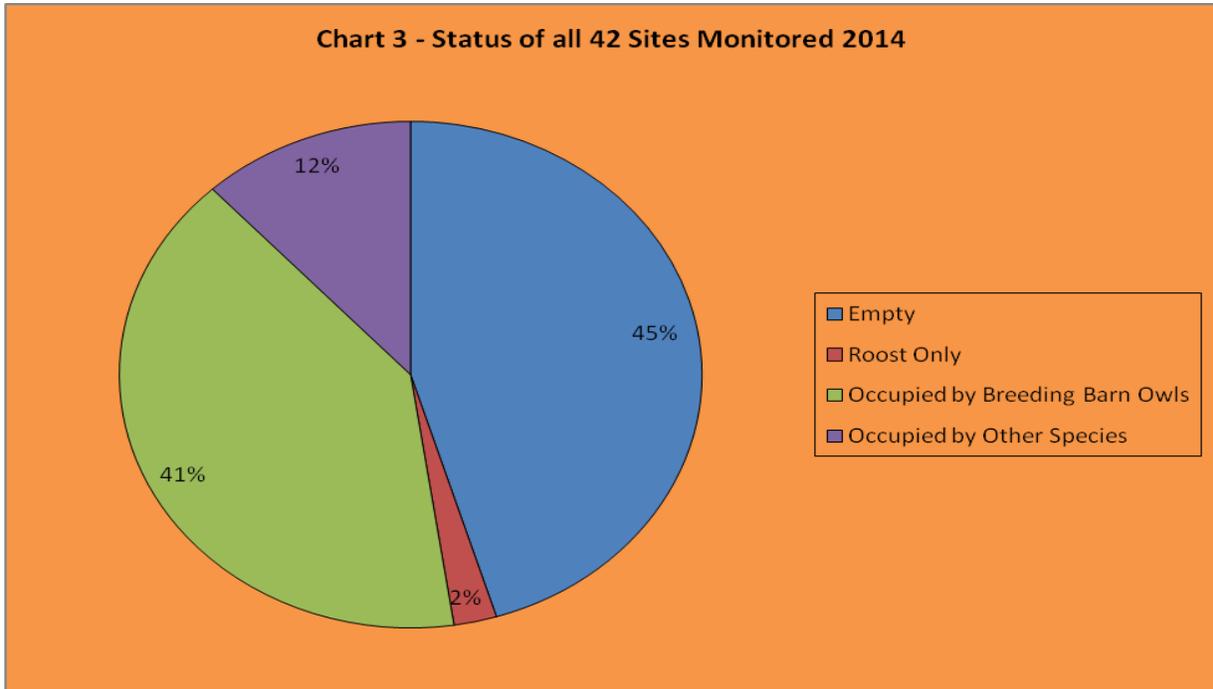


Chart 3 includes all sites monitored in 2014 (total 42) and Chart 4 includes all baseline dataset sites monitored in 2014 (total 20) regardless of type of use.



Comparison with 2013

	2014	2013
Total number sites checked	42	59
% breeding Barn Owls	41%	24%
Average number fledged from Barn Owl nest sites	3.64	2.33
% roosts	2%	20%
% occupied by other species	12%	15%
% empty sites	45%	41%

The very high number of fledged young at sites in 2014 (average 3.66), is well above the figure of 3.2 surviving owlets per nest needed for the Barn Owl population to remain stable (Taylor I, 1994).

Baseline dataset – comparison with 2013

	2014	2013
Number of Barn Owl pairs making a breeding attempt	6	6
Number of chicks fledged	22	15
Average number of chicks fledged	3.6	2.5

The number of pairs attempting to breed within this dataset has always remained the same with the exception of 2011 when 8 pairs attempted to breed. The number still stands at 6 despite the removal of the supplementary fed sites, giving a good indication of the wild population dynamics. The number of chicks this year is considerably higher as is the average, again a figure which is thought can sustain the Barn Owl population at present.

Weather

Although 13/14 was an extremely stormy and wet winter, the temperature generally stayed mild. Britain had the warmest December since 1988, but also the windiest for 20 years (Tait M, 2014).

Discussion

From the overall results a higher percentage of Barn Owls bred this year, 41% compared to 24% during 2013. The results still show that the percentage of sites empty is higher than those used as breeding sites, but there are fewer sites used as roosts compared to 2013. So while we see more birds breeding this year, it still does not indicate an increase in population (this is to be expected from the number of fledglings in a poor season like 2013). It does however show that more birds have actively come into breeding condition this year which you would expect from a better vole year with an abundance of prey.

2014 was a much better year for the Field Vole *Microtus agrestis*, in line with the predicted cycle of 3.4 years when this species peaks (Shawyer C, 1987). However what was interesting is the lack of vole cache's found at nest sites this year compared to 2011 when the vole population was last at its peak.

The average number of young fledged is much higher (the highest when compared to the previous years since our records began 2004). This exceeds the number needed to sustain a population and with the winter of 2014/15 so far remaining mild, we would hope that the fledged young will be able to boost the breeding population for 2015.

Second Broods

During 2014 breeding season we encountered two second broods, both fledging 2 young. This is the first time I have known of a second brood since I have worked on the monitoring project in 6 years. There is no doubt that the number of second broods which were found this year bolstered numbers of young. However both sites were supplementary fed, therefore indicating that although around the country many wild barn owls were found to produce second broods this year, the SW Cumbria population still struggle unless aided, even in a good vole year.

Baseline sites

Interesting that the baseline sites have changed but the figures remain similar for the wild/supplementary fed compared to the wild only sites. 30% were occupied by Barn Owls on both years. This year only 5% were used as roosts by Barn Owls compared to 15% last year.

Overall 2014 was a very good breeding season, but what does continue to be a concern (as mentioned in the discussion of the 2013 report) is that the number of empty sites has increased. In fact this figure is at its highest this year, 45% overall and 50% for the baseline figures. This being the highest percentage since I have been working on the Barn Owl monitoring project.

BTO Ringing

Ringing commenced again during 2014 and a total of 42 pulli were ringed out of 62. Two failed to fledge the nest out of a brood of five and no other recoveries have been reported so far. Many others were not accessible due to the nature of the sites, and some had already fledged out of a large brood and only the younger ones were captured at the site.

Acknowledgments

The World Owl Trust would like to thank the many landowners who granted permission for Barn Owl sites to be monitored. Many landowners are very keen to help in any way and give the Trust information about the owls they see, the site and its history, and the surrounding area. Thanks also to the volunteers who give up their time, both from members of the public to members of the Trusts own keeping staff and have invaluable local knowledge.

References

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