

State of the UK Barn Owl population – 2015

‘A poor year almost everywhere’

Results from 32 independent groups collated by the Barn Owl Trust



Barn Owl Trust
Bisham Barn Owl Group
Brandon Ringing Group
Bucks Owl Raptor Group
Cam Valley Wildlife Group
Cheshire Barn Owl Groups
East Riding Barn Owl Conservation Group
Garry Steele
Gil Gaylor
Gwyn Roberts
Hawk and Owl Trust

Jersey Barn Owl Conservation Network
Lewis Raptor & Owl Group
Lower Derwent Valley NNR Barn Owl Group
Manchester Raptor Group
North Cumbria Barn Owl Study Group
North West Norfolk Ringing Group
Pang Valley Barn Owl Group
Powys Species Habitat Protection Group
Scottish Raptor Study Group
Shropshire Barn Owl Group
South Warwickshire Barn Owl Survey

Staffordshire Barn Owl Action Group
Stour Valley Wildlife Action Group
Suffolk Community Barn Owl Project
Sussex Ornithological Society - Barrie Watson
Sussex Ornithological Society - Graham Roberts
Ulster Wildlife
Vale Barn Owl Conservation
West Cornwall Ringing Group
Wolds Barn Owl Group
World Owl Trust



Photo: Neil Higginson

Conserving the Barn Owl and its Environment

State of the UK Barn Owl population - 2015

Introduction

The *State of the UK Barn Owl population* was originally conceived as a one-off report to draw together the shockingly poor results that various groups sent in voluntarily to the Barn Owl Trust back in 2013. Remarkably, 2014 was also an exceptional year and worthy of a special report.

In the world of Barn Owl conservation this type of publication is unique. For that reason, and because more and more groups want their data included, it seems to have evolved into an annual report – hence this document.

We are, as ever, very keen to acknowledge the huge amount of work carried out by independent Barn Owl groups, projects, and volunteers across the UK. We are particularly grateful to the 32 groups who provided their results for 2015. Between them, the contributors to this report monitored a staggering 5,963 potential nest sites and recorded 1,224 active nests. As well as providing a unique overview of breeding success in the previous year, this information underpins the huge amount of conservation work that is carried out, very often by the same people.

A full list of contributors and logos (where available) are presented on the cover. A UK map showing the counties containing groups/projects that supplied data is presented on the last page along with links to contributors' own webpages (where available). Many of the contributors can be contacted via the new 'Barn Owl Directory' which contains 87 Barn Owl Groups and Projects.

This report simply provides an indication of Barn Owl nesting success during the last calendar year and makes no attempt to estimate UK population level. Although some possible reasons for year-on-year changes in nesting success are discussed, definitive answers to questions beginning with 'why' are well beyond its scope. However, answers to simple questions like 'how did Barn Owls do last year?' or 'how do my results compare to others?' may be found herein.



Photo: Phil McLean

Definitions

NO. OF SITES CHECKED means visits to potential nest sites.

NESTING OCCUPANCY is where nesting actually occurred (one or more eggs laid).

BROOD SIZE is the number of live young counted at any time between hatching and fledging.

The calculation of MEAN BROOD SIZE excludes nests where there were no live young.

E means estimated.

Caveats

1. The figures provided in the table are accurate (unless marked 'E'). However, methodological variation between groups means that they can only provide indications of what happened to the population as a whole (in terms of nesting occupancy and brood sizes).

2. For some individual groups, anomalies can arise with regard to year-to-year changes in 'Numbers of Sites Checked' both in terms of the 'All-years average' and 'Actual'. This is because the authors have not imposed criteria for the inclusion/exclusion of individual sites.

3. The way in which potential nest sites are counted varies between groups and sometimes between years. A good example of the effect of a 'change in counting method between years' can be seen in the Appendix: note 25.

4. The probability of individual sites being occupied varies tremendously. Some datasets include sites that may never have been occupied whilst others only include sites where pairs have nested previously.

5. The proportion of nest sites that were monitored varies between counties.

6. The vast majority of sites were checked by inspection to confirm/discount breeding, and determine brood size. However, some groups accepted reports from trusted/knowledgeable site owners, particularly where nest cavities were inaccessible.

7. At most sites, only one nest inspection was carried out. Chicks may have died before this nest inspection or may die between inspection and fledging. Some sites are visited more than once and figures given for brood size may have been derived from either one of these visits.

8. The calculation of all-years average varies between contributors according to how many years the project in question has been running.

9. One or two individual years may be omitted from data sets due to restrictions on farm visits such as in 1996 due to BSE and 2001 due to Foot and Mouth Disease.

Please note:

- Where data ranges are submitted (e.g. 180-230) the mid-point is used and treated as an estimate.
- NESTING OCCUPANCY totals include zeros and MEAN BROOD SIZE totals exclude zeros.
- In the NESTING OCCUPANCY section, the % change from norm represents the % difference between the proportion of potential sites occupied in the current year and the average of all previous years.



Photo: David Ramsden

County / group	NO. OF SITES CHECKED		NESTING OCCUPANCY			MEAN BROOD SIZE			Notes - see appendix
	all-years average	Actual in 2015	all-years average	Actual in 2015	% change from norm	all-years average	Actual in 2015	% change from norm	
Ayrshire & Galloway - Scottish Raptor Study Group – Geoff & Jean Sheppard	75	71	70	45	-32%	3.50	2.13	-39%	1
Berkshire – Pang Valley Barn Owl Group, John Dellow	114	136	20	15	-37%	3.30	2.10	-36%	2
Berkshire (north) & Buckinghamshire (south) - Bisham Barn Owl Group	12	103	3	24	-07%	3.00E	2.00	-33%	3
Buckinghamshire - Bucks Owl Raptor Group	186	250E	22	10	-66%	2.70	2.00	-26%	4
Cheshire Barn Owl Groups / John Mycock	500E	370	70E	56	08%	2.50E	1.84	-26%	5
Cornwall – West Cornwall Ringing Group	36	41	27	30	-02%	3.00	3.50	17%	6
Cumbria - North Cumbria Barn Owl Study Group	125	121	69	56	-16%	3.04	2.98	-02%	
Cumbria (south west) - World Owl Trust	60	41	26	17	-04%	2.38	2.17	-09%	7
Devon & Cornwall (east)- Barn Owl Trust	80	75	35	38	16%	2.89	2.76	-04%	
Isle of Wight – Gil Gaylor	44	56	42E	42	-21%	3.00	3.00	00%	
Jersey Barn Owl Conservation Network	96	95	44	4	-91%	2.66	2.00	-25%	8
Leicestershire - Vale Barn Owl Conservation	140	140	23	9	-61%	2.60	2.22	-15%	9
Lincolnshire - Garry Steele	35E	61	70E	6	-95%	2.70E	1.60	-41%	10
Manchester Raptor Group	54	68	19	27	13%	2.54	2.36	-07%	11

County / group	NO. OF SITES CHECKED		NESTING OCCUPANCY			MEAN BROOD SIZE			Notes - see appendix
	all-years average	Actual in 2015	all-years average	Actual in 2015	% change from norm	all-years average	Actual in 2015	% change from norm	
Norfolk - NW Norfolk Ringing Group - John Middleton	467	376	200	137	-15%	2.28E	1.70	-25%	12
Powys Species Habitat Protection Group	34E	60E	20E	26	-26%	3.70	2.33	-37%	13
Shropshire Barn Owl Group	200E	200	34	35	03%	2.85	2.10	-26%	14
Somerset - Hawk and Owl Trust – Chris Sperring	46	212	37E	61	-64%	2.58	3.00	16%	25
Somerset NE - Cam Valley Wildlife Group	87	148	11	18	-04%	2.60	2.33	-10%	15
Staffordshire Barn Owl Action Group	229	294E	25	36E	12%	3.37E	2.14E	-36%	16
Suffolk Community Barn Owl Project (inc. Suffolk Owl Sanctuary data & others)	1185	1257	191	265	31%	2.16	1.40	-35%	17
Sussex - Barrie Watson (team)	120	167	57	42	-47%	3.16	2.55	-19%	18
Sussex - Graham Roberts	40E	42	14E	17	16%	2.90	2.60	-10%	19
Warwickshire - Stour Valley Wildlife Action Group / South Warwickshire Barn Owl Survey / James Rushforth (Brandon Ringing Group)	202	304	30	30	-34%	3.24	2.63	-19%	20
Wiltshire - Lewis Raptor & Owl Group	650E	674	130	117	-13%	2.07	2.06	-00%	21
Yorkshire - East Riding Barn Owl Conservation Group	580E	540	150E	54E	-61%	3.00	2.50	-17%	22
Yorkshire – Lower Derwent Valley NNR Barn Owl Group	120	50	80	4	-88%	3.00E	2.50	-17%	23
Yorkshire – Wolds Barn Owl Group	83	11	26	3	-13%	2.78	3.00	08%	24
TOTALS (zeroes are excluded)	5,600E	5,963E	1,545E	1,224E	-26%	2.84E	2.34E	-18%	

Year	Nesting Occupancy	Mean Brood Size
2013	Down by 70%	Down by 12%
2014	Up by 16%	Up by 36%
2015	Down by 25%	Down by 16%

State of the UK Barn Owl Population results 2013-15

Variation in nesting occupancy and mean brood size when compared to the average of all previous years.

How did Barn Owls do in 2015?

Overall, 2015 was a poor year for Barn Owls in the UK but with marked geographical variation. Our initial impression, that Barn Owls in the west had a good year and those in the east had a poor year, turned out to be unrepresentative. In reality the results showed marked variation within regions and even within counties. It is most appropriate, therefore, to discuss results region by region:

East of England

Barn Owls in Lincolnshire experienced an even worse year than in 2013 with the number of nests (nesting occupancy) 95% below the all-years average and mean brood size 41% down.

Garry Steele (Lincolnshire) commented:

“For me this was by far-and-away my worst year ever for barn owl productivity – even worse in fact than 2013, which was generally deemed to be the poorest year in Lincolnshire of recent times. When checked, a good number of my sites during 2015 were actually found to contain adult roosting pairs, but the vast majority were choosing not to breed..... and continued not to do so in every case bar one following some late secondary visits I made to a representative selection of my sites in autumn 2015”.

Similarly, in parts of East Yorkshire, namely the Lower Derwent Valley and East Riding, Barn Owls had a pretty terrible year with nesting occupancy 88% and 61% down and mean brood size 17% down. Conversely, in the nearby Yorkshire Wolds nesting occupancy was only 13% down although the sample size was much smaller.

Craig Ralston (Lower Derwent Valley NNR Barn Owl Group) commented:

“Large numbers of day flying barn owls seen in feb-april 2015 were clearly struggling to find food – five were picked up dead and weighing less than 200g. Small mammal trapping also showed a big reduction in field vole numbers. Birds were still present in nest sites but largely a blank year – adults seemingly taking a year off”.

Rob Salter (East Riding Barn Owl Conservation Group) commented:

“2015 was the worst year for barn owl breeding in my conservation area. One of the strongholds for barn owl is the Hull Valley. In 2015 I didn’t find any successful breeding pairs. Barn owls which nested within 3km of the east coast did do slightly better which was the first area I checked. At first I thought it was going to be an ok year. I expected a significant drop in the number of young to fledge the nest compared to 2014 but was surprised how drastic. There was quite a high occupancy of adults at the potential nesting sites but a second visit in summer proved no success.”

Barn Owls monitored by the NW Norfolk ringing Group had a pretty poor year with nests and brood sizes down by 15% and 25% respectively. Suffolk bucked the trend with a fantastic 265 pairs nesting (31% above average) but a mean brood size of only 1.4 (35% below average).

South of England

In West Sussex nesting occupancy was 16% up but, in complete contrast, in Mid Sussex it was 47% down despite the fact that these areas are immediately adjacent and even overlap a little. Further north, where the Bisham BOG straddles the Berks/Bucks border, nesting occupancy was only 7% below average but the Bucks ORG reported it to be a disappointing 66% below. West Berkshire reported nesting occupancy and mean brood size 37% and 36% down respectively.

John Dellow (Pang Valley Barn Owl Group) commented:

"We had no 2nd broods this year. None were even attempted. We believe that this was due to a lack of short-tailed voles early in the year. This meant that breeding was late and this did not give time for 2nd broods".

Barn Owls in Wiltshire had a decidedly mediocre year with nesting occupancy just 13% below the all-years average.

Nigel Lewis (Lewis Owl and Raptor Group) commented:

"Last year's breeding bonanza has improved the overall Barn Owl population in our area but the lack of voles was very evident. To have had 31 pairs fail is evidence of this, the weather was not to blame for once".

Wales and mid-western England

Barn Owls in Powys had a pretty poor year with both nesting occupancy and mean brood size well below normal (down 26% and 37% respectively) although further south they did a little better: Gwyn Roberts in Swansea reported that "36 sites were checked, of these 11 were active producing 32 young, giving a mean brood size of 2.9". Unfortunately Gwyn was unable to provide all-years averages so his results do not appear in the main Results Table.

Manchester, Cheshire, Shropshire, and Staffordshire all reported above average nesting occupancy (3% to 13% up) but below average mean brood sizes (7% to 36% down) whereas results to the east were decidedly poor. In Warwickshire nesting occupancy was 34% down and further east in Leicestershire it was 61% down.

John Mycock (Cheshire Barn Owl Groups) commented:

"We had hoped/anticipated an average year but as for the rest of the UK, breeding results were well below last year and previous average figures - Mother Nature at her most unpredictable".

Helen Cottam (Staffordshire Barn Owl Action Group) commented:

"We began to question the amount of available prey during the breeding season and whether 2015 was a dip in the 4 year vole cycle."

Cumbria and SW Scotland

Barn Owls also had a poor year in south-west Cumbria, north Cumbria, and Geoff Sheppard's study area in West Galloway. Nesting occupancy was 4%, 16%, and 32% down respectively and mean brood sizes were 9%, 2% and 32% down.

Geoff Sheppard commented:

“Vole numbers within the fragmented habitat of West Galloway appeared patchy as occupancy was good in some areas while many sites remained empty in others” and went on to say *“Conditions appeared to favour the early breeding birds who produced larger broods than those which bred later. Brood size generally was significantly lower than usual with only two broods of 4 and many late broods producing only a single large young, in one case, from a clutch of 8 eggs. Dead young were found in a number of cases suggesting lack of prey or weather conditions limiting the adults' ability to hunt”*.

Geoff also provided some data from other Barn Owl workers in Dumfries & Galloway and South Ayrshire which were also indicative of a poor year. They ringed 185 pulli in 83 successful broods giving a very low mean brood size of 1.63.

SW England

Nesting occupancy in West Cornwall was very close to their all-years average but their mean brood size figure, at 3.5, bucked the trend being the highest recorded in any part of the UK in 2015 and 17% above their all-years average. Conversely, in east Cornwall and Devon nesting occupancy was 16% above average and mean brood size 4% below. Further east, the Cam Valley area of north Somerset reported their second highest number of nests but checked far more sites than usual. Consequently, nesting occupancy was slightly below their all-years average (-4%) as was the mean brood size (-10%).

Isle of Wight and Jersey

The number of nests recorded on the Isle of Wight was 21% below the all-years average but mean brood size held up well at 3. Barn Owls on Jersey had a terrible year where nesting occupancy was 91% down (almost as bad as 2013) and mean brood size 25% down.

What does all this mean?

With the possible exception of East Yorkshire, Lincolnshire and Jersey, the extent of variation around the UK was probably quite normal – time will tell. Given that the preceding winter weather, and the year itself, was generally mild it is most unlikely that the poor results were not due to the weather but due to a general lack of prey (except perhaps in West Cornwall). It is well known that annual variations in small mammal abundance are not synchronised across the whole country and that certainly seems to have been the case in 2015.

Northern Ireland

As some of us know, cold searching in areas of very low population density can be extremely demoralising! Barn Owl workers in such areas certainly deserve our respect and encouragement. Catherine Fegan of Ulster Wildlife provided the following summary:

“In 2014, Ulster Wildlife knew of 2 active nest sites in Northern Ireland, this despite intensive survey effort from 70 volunteers checking all possible nest sites across 124 km². At least 4 chicks fledged from one nest site and 1, possibly 2 chicks fledged from the other (both nests are inaccessible so this is based on observations).

2015 saw similar survey effort but again no new nest sites were found nor any evidence of barn owls (pellets/ feathers). However independent to the survey a new nest was discovered in an outdoor nest box in Co. Down. This is the first time we know of barn owls in Northern Ireland nesting in a box and meant that for the first time we were able to ring chicks. At one of the 3 known nests the female disappeared shortly before breeding so it was unsuccessful; at the other nest 1 chick fledged, and we were able to ring 2 healthy chicks at the new nest box.”

Catherine kindly supplied the map (right) which shows an encouraging total of 213 sightings reported in 2015. This suggests that Barn Owls in Northern Ireland are quite widely distributed which begs the question – why are so few nests recorded? Maybe the prevalence of derelict cottages with inaccessible chimneys has something to do with it? Ulster Wildlife are looking into this. If you see a Barn Owl in Northern Ireland PLEASE DO REPORT IT.



Map showing 213 Barn Owl sightings reported to Ulster Wildlife in 2015

Previous years: 1995 to 2014 - including new information

1995-2009

The only reliable estimate of Barn Owl numbers in the UK was c. 4,000 pairs in the period 1995-97 (Project Barn Owl Report, 2000) and there is some evidence that numbers increased in the period 1997-2009 particularly in eastern England. Additionally, the BTO Bird Atlas 2007-11 showed a northerly range expansion since the previous 1993 atlas. These increases were probably the result of a general climate warming in the period 1989-2009 and the erection of numerous nestboxes in, for example, parts of The Fens and East Anglia. It is quite probable that in 2009 the UK Barn Owl population level was substantially greater than 4,000 pairs.

2009-2012

There can be little doubt that the unusually severe winters of 2009/10 and 2010/11 reduced total population size although ‘before and after’ population levels will never be known. In spite of these setbacks, additional data submitted to the authors suggest that 2012, with the hottest March since 1997, was quite a reasonable year. For example, the Suffolk Community Barn Owl Project which monitored a staggering 1,191 boxes in 2012 recorded 319 nests which, at the time, was the highest number since monitoring started in 2007. However, in some parts such as SW Scotland (Geoff Sheppard pers. com.) and Cumbria (Ian Armstrong pers. com.) 2012 was a very poor year and in Devon widespread nestling mortality resulted in the average brood size dropping from 3.68 to 2.75 during the wettest June since 1766.

2013

Given that 2012 was a relatively good year (overall) and winter 2012 / 2013 was much less severe than the preceding three, Barn Owl numbers at the start of 2013 were probably quite reasonable (probably lower than in 2009 but possibly still higher than 1995-97). March 2013 was the coldest since 1962 and during the month the number of dead Barn Owls reported to the BTO was 280% above normal.

Without exception, every monitoring scheme that contributed data reported a high proportion of nest sites with no signs of occupation and Major Nigel Lewis's comment summed it up very well: "*the worst year in the 30 years I have been owling in Wiltshire*". The State of the UK Barn Owl Population 2013 showed that nesting occupancy in 2013 was an estimated 72% below the all-years average and mean brood size (2.63) was down by 12% (based on information provided by 26 data contributors who between them checked an estimated 6,344 potential nest sites).

2013: New Information

The widespread absence of adults from annual nest sites and exceptionally high mortality recorded by the BTO suggested that the missing birds were dead. Conversely, the exceptionally high nesting occupancy the following year suggested that the missing birds had been simply roosting away from their nest sites. The 2013 Devon Barn Owl Survey Report has now thrown new light on what happened.

The 10-yearly Devon survey is unique because it includes the checking of all known roost sites as well as nest sites. If the birds were alive and roosting elsewhere, the big drop in nesting occupancy should have been mirrored by a bigger increase in roost occupancy (bigger because of birds roosting singly). In the event this was not the case. The Devon Report, based on the checking of 1,070 sites, showed a 65% drop in nesting occupancy and an increase in roost occupancy of only 16.9%. These figures support the view that a high proportion of the missing birds were not simply roosting elsewhere but were in fact dead.

This begs the question "where did all the Barn Owls come from that nested in 2014?" They must have been a combination of those that survived 2013 and young birds produced very late in 2013 who were all probably helped by the fact that winter-spring 2013-14 was so mild that Field Voles were even breeding in mid-winter (see State of the UK Barn Owl Population 2013).

2014

With a mild winter followed by an early spring and a long and pleasant summer, 2014 turned out to be the warmest year ever recorded - according to the National Climatic Data Centre. Great weather happened to coincide with a peak year for small mammals and Barn Owls had a very productive year in many areas. Berkshire, Lincolnshire, Shropshire and Warwickshire did particularly well with nesting occupancy 71% to 193% above normal (UK average +16%). Brood sizes were phenomenal in many areas, with records broken in Suffolk and Wiltshire. Broods in Somerset were, on average, 84% bigger than normal (UK average +35%).

Sadly, 2014 was not an amazing year everywhere. Brood sizes in parts of SW Scotland, east Wales and the Isle of Wight bucked the trend by being no higher than normal and the mean brood size of the biggest UK Barn Owl monitoring scheme in Lincolnshire (the Bowden and Ball Ringing Group) was only 13% above their all-years average.

The issues

Although extreme weather events can have a huge impact on Barn Owl survival and productivity, it is important to remember; 1) that small mammal abundance is, generally speaking, an even more powerful influence and that small mammal abundance varies independently of the weather, and 2) man-made hazards kill thousands of Barn Owls every year.

The vast majority of farmland is intensively managed and lacking prey-rich habitat features (such as rough tussocky grassland with a >7cm litter-layer). There is little doubt that a general lack of prey is the principal cause of low productivity (most years) and low population density across most of the UK. Barn Owl sites become unoccupied, not so much because older birds die, but because there is a shortage of younger birds to replace them. Indeed, juvenile survival exerts a bigger influence on total population size than any other life-cycle parameter (Population trends in British Barn Owls, BTO).

So as well as concentrating on habitat improvement to benefit all Barn Owls, it is important to consider the causes of juvenile mortality, the most significant of which is trunk-road deaths (BOT). Roads need to be made safer by the planting of low-flight prevention screens - [more information](#).

According to latest government figures, 87% of Barn Owls contain rat poison. The proportion that dies as a direct result is probably low but the possible effects of sub-lethal doses are a cause for concern. It is possible that low-level contamination reduces the birds' ability to cope during hard times. An industry-led Stewardship Scheme for the use of Anticoagulant Rodenticides is being phased in between February 2015 and June 2016 with the aim of reducing unwanted poisoning - [more information](#). This year (2016) the Barn Owl Trust has responded to an EU consultation on alternatives to anticoagulant rodenticides.

Nestbox provision is the most deliverable element of Barn Owl conservation and the fantastic success of box schemes in areas where food availability was not the limiting factor demonstrates their value. The possibility of free nestboxes can also be used as an incentive for habitat creation as demonstrated by the Suffolk and Somerset community Barn Owl projects.

As the UK gets closer to Barn Owl nestbox saturation and a box-dependent owl population, the emphasis needs to change towards box replacement. Replacement provides opportunities to improve nestbox designs. This reduces nestling mortality that results from boxes that are less than 460mm deep and boxes that are difficult for climbing owlets to get back into - [more information](#).

There is a lot more information on all these topics in the [Barn Owl Conservation Handbook](#).



Further information

Barn Owl Conservation Handbook, a comprehensive guide for ecologists, surveyors, land managers and ornithologists. Barn Owl Trust (2012) Pelagic Publishing, Exeter.

Barn Owls and Major Roads: results and recommendations from a 15 year research project. Ramsden, D.J., (2003) Barn Owl Trust, Ashburton.

Barn Owls: Predator-prey Relationships and Conservation, Taylor, I. (1994) Cambridge University Press

BTO Bird Atlas 2007-11: the breeding and wintering of birds in Britain and Ireland. Balmer, D.E., Gillings, S., Caffrey, B.J., Swann, R.L., Downie, I.S., & Fuller, R.J. (2013) BTO Books. British Trust for Ornithology, Thetford.

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Project Barn Owl Final Report. Toms, M.P., Crick, H.P.Q. & Shawyer, C.R. (2000) BTO Research Report, 157. HOT Research Report 98/1. British Trust for Ornithology, Thetford.

State of the UK Barn Owl Population 2013. Barn Owl Trust (2014), Ashburton

State of the UK Barn Owl Population 2014. Barn Owl Trust (2015), Ashburton



Appendix - contributors notes/comments to be read in conjunction with the Results Table.

1. Ayrshire & Galloway – Scottish Raptor Study Group – Geoff and Jean Sheppard

Vole numbers within the fragmented habitat of West Galloway appeared patchy as occupancy was good in some areas while many sites remained empty in others. As in 2014, no sites were occupied in the top area of the North Rhins but overall, there was a pleasing increase in nest occupancy as compared to the previous year. However, numbers are still well down as compared to historical averages.

Conditions appeared to favour the early breeding birds who produced larger broods than those which bred later. Brood size generally was significantly lower than usual with only two broods of 4 and many late broods producing only a single large young, in one case, from a clutch of 8 eggs. Dead young were found in a number of cases suggesting lack of prey or weather conditions limiting the adults' ability to hunt.

There was evidence that the poor summer caused some desertion of eggs followed by a further clutch being laid later and successfully hatched. A significant number of unhatched eggs were found to be infertile. The above information is based on our Barn Owl study area covering The Rhins and may not be entirely representative of the whole of South West Scotland.

Many of the Barn Owl workers in Dumfries & Galloway and South Ayrshire are also licensed ringers who submit their ringing data to us. A summary of the data we have taken from their ringing submissions for 2015 shows 185 pulli ringed from 83 broods and a mean brood size of only 1.63.

2. Berkshire – Pang Valley Barn Owl Group – John Dellow

Past performance is based on years 2010 to 2014.

Number of chicks counted is number of birds believed to have fledged. Unhatched eggs and chick losses before fledging have not been counted.

We had no 2nd broods this year. None were even attempted. We believe that this was due to a lack of short-tailed voles early in the year. This meant that breeding was late and this did not give time for 2nd broods.

3. Berkshire (north) & Buckinghamshire (south) – Bisham Barn Owl Group

Monitoring only began in 2014 so 'all-years average' figures given are just 2014. In 2015, out of the 24 nests with breeding attempts, nine failed to produce any young. The mean brood size of 2 is based on 24 young produced from 12 nests.

The all-years average brood size figure provided (6) was based on three broods found in 2014. The figure of 3E is given in order to be more representative of a genuine all-years average.Eds.

4. Buckinghamshire – Bucks Owl Raptor Group

Figures from 2014 are not available therefore the all-years averages given are up to and including 2013 rather than 2014.

5. Cheshire Barn Owl Groups – John Mycock

We had hoped/anticipated an average year but as for the rest of the UK, breeding results were well below last year and previous average figures - Mother Nature at her most unpredictable.

Contributors notes continued

6. Cornwall – West Cornwall Ringing Group

Only five sites were occupied this year without any sign of breeding, which is the lowest since 2012. We did see three complete failures this year which is very unusual: brood of small chicks disappeared, brood of large dead chicks (PMs found no cause) and dead female on incomplete clutch. We also had an early failure at one site, with a replacement clutch laid two days later in second box in adjacent barn.

7. Cumbria (south west) – World Owl Trust

2015 was an interesting year with the same number of pairs attempting to breed as 2014. This year however fewer pairs were actually successful producing just over half the numbers of young from last year.

8. Jersey Barn Owl Conservation Network

The team monitoring the Jersey boxes has changed, from Sept 2015. Hence the larger number of boxes checked as the team is now 6 split to cover the East and West of the island.

Between the 2 teams 36 owls were seen.

9. Leicestershire – Vale Barn Owl Conservation

Lowest number of nests since the group started in 2009. The all-years averages are based on 2009-2015 (rather than 2014).

10. Lincolnshire – Garry Steele

For me this was by far-and-away my worst year ever for barn owl productivity – even worse in fact than 2013, which was generally deemed to be the poorest year in Lincolnshire of recent times.

When checked, a good number of my sites during 2015 were actually found to contain adult roosting pairs, but the vast majority were choosing not to breed..... and continued not to do so in every case bar one following some late secondary visits I made to a representative selection of my sites in autumn 2015.

11. Manchester Raptor Group

Not too bad a year considering gloomy reports from elsewhere, but brood numbers were down, 2 being a popular number and 5 the maximum. All-years averages are based on the last 5 years.

12. Norfolk – NW Norfolk Ringing Group

Following an all-time record year in 2014 this year turned out to be rather poor with small brood sizes and some regular sites not holding any birds or only a single or pair roosting and not attempting to breed.

13. Powys Species Habitat Protection Group

More breeding sites – an increase from 2014(14) to 2015(21). However, brood sizes were smaller due to the vole population crash.

14. Shropshire Barn Owl Group

Some salient points: Clutches ranged from 1-6 eggs, 3 nests held infertile/deserted/predated clutches, non-breeding pairs noted at 5 sites, no second broods noted (appears to be more notable in peak breeding seasons).

Contributors notes continued

15. Somerset – Cam Valley Wildlife Group

Our area covers about 300 sq Km around Midsomer Norton & Radstock in Somerset. Number of breeding sites (18) is considerably up on past average and the second highest since our records began in 2004. We had 12 breeding sites in 2014.

6 of the 2015 breeding sites had not been occupied in 2014 or 2013 but had been breeding sites in the past. 3 others have never been occupied before – that suggests 9 of the 18 were new pairs.

Laying date was very variable. Brood size shown as 2.33 is slightly less than all years' average – It was the number of surviving chicks at the time we checked nests which was later than usual, so original brood size almost certainly would have been higher.

The number of potential nest sites (boxes plus other non box sites which at some time were found occupied) has continually increased between 2004 (38) and 2015 (160)- an increase of 421%.

16. Staffordshire Barn Owl Action Group

The group was hopeful for a good breeding year following a relatively mild winter and with a good vole population in 2014. During monitoring we found 2 sites with a clutch of 7 eggs and 3 sites with a clutch of 5 eggs, although we managed to ring all 5 chicks at one site not all the chicks at the other sites were present when we returned for ringing (some may have fledged or not survived). In 2015 we had our second lowest average brood size the lowest being in 2008 (2008-2015). At 5 nest sites we noted 6 dead chicks, we also had 2 pairs that abandoned their eggs and 4 pairs that didn't attempt breeding at all. We had one possible late brood. We began to question the amount of available prey during the breeding season and whether 2015 was a dip in the 4 year vole cycle.

17. Suffolk Community Barn Owl Project

Barn Owls were present in 424 of the 1,257 boxes, which was a record for the Project. However, productivity was relatively low.

18. Sussex – Barrie Watson (team)

We mainly look at West Sussex sites, with a few in East Sussex. Roosting adults only were found in 27 boxes used for breeding in the past. Three nest boxes were used for the first time, though may represent a move from nearby. Largest broods were three of four young each.

19. Sussex – Graham Roberts

Brood sizes were well down on 2014 and included two broods of just one chick and four broods of two chicks.

20. Stour Valley Wildlife Action Group, South Warwickshire Barn Owl Survey, James Rushforth (Brandon Ringing Group)

Also 34 non-breeding pairs and 23 single birds recorded at or near other boxes.

21. Wiltshire – Lewis Raptor & Owl Group

Last year's breeding bonanza has improved the overall Barn Owl population in our area but the lack of voles was very evident. To have had 31 pairs fail is evidence of this, the weather was not to blame for once. In forty years of ringing Kestrels (over 5,000 ringed) the average brood was 2.14 the worst ever. Two nest sites had chicks predated never known this before. We have a video of a Barn Owl predated a Little Owl chick from a Little Owl nest box.

Contributors notes continued

22. Yorkshire - East Riding Barn Owl Conservation Group

2015 was the worst year for barn owl breeding in my conservation area. One of the strongholds for barn owl is the Hull Valley. In 2015 I didn't find any successful breeding pairs. Barn owls which nested within 3km of the east coast did do slightly better which was the first area I checked. At first I thought it was going to be an ok year. I expected a significant drop in the number of young to fledge the nest compared to 2014 but was surprised how drastic. There was quite a high occupancy of adults at the potential nesting sites but a second visit in summer proved no success.

23. Yorkshire – Lower Derwent Valley NNR Barn Owl Group

Large numbers of day flying barn owls seen in feb-april 2015 were clearly struggling to find food – five were picked up dead and weighting less than 200g – and several owls were seen targeting birds as prey – one individual was seen to take water rails from a reedbed situation on three occasions in April/May. Small mammal trapping also showed a big reduction in field vole numbers. Birds were still present in nest sites but largely a blank year – adults seemingly taking a year off – of the four broods found three were being supplementary fed by local landowners. Lower productivity was also mirrored in Tawny owls (no successful broods) and kestrels (reared young but brood sizes down on the exceptional year of 2014). Local rehab centres also reported lower number of owls and birds of prey generally in this part of Yorkshire suggesting a wider pattern of reduced productivity.

24 Yorkshire – Wolds Barn Owl Group

Barn owls in East Yorkshire had a poor year in 2015. Twelve box visits were made one of which was a repeat visit. Adult birds were present in nine of these but with little sign of any breeding in most of them.

Only three pulli were ringed (in one box) and I visited three boxes late in the season and was able to ring three adult birds-one in each box. These birds were in very good condition and of a good weight. It was evident that my pairs, together with those of most other East Yorkshire workers with whom I have spoken, had made the 'decision' to refrain from breeding due to insufficient available prey together with almost constant wet and windy weather in the first part of the season which was inimical to hunting. I understand that some late breeding was attempted but I was unable to cover this. The condition of my few late season adults suggests to me that adult birds were doing well by use of this strategy but I must say that I am concerned by the high incidence of rainfall in the area so far this winter accompanied, yet again, by frequent high winds.

25 Somerset - Hawk and Owl Trust

This year has seen our highest ever number of successful barn owl nest sites recorded in Somerset. 183 owlets were recorded in 61 nests, giving an average brood size of 3. 33 of the nests were in previously known sites, but there were 28 new nest sites recorded this year. 31 of the nest sites which are regularly used failed to produce young this year.

No second broods were recorded this year, probably because of the late start to the breeding season and the largely wet summer months which would have taken their toll on the adult birds and prevented them from returning to breeding condition after first broods had fledged.

For 2015, Chris provided figures for 212 nestboxes he checked (of which 61 had nesting) rather than the usual core of 46 annual monitoring sites (of which 37 usually had nesting). For this reason the Results Table shows that nesting occupancy was 64% below average when Chris recorded his "highest ever number of successful barn owl nest sites". This change in site counting has caused the overall UK Nesting Occupancy to drop by a further 2% (-26% rather than -24%). Eds.

Links to contributors own web pages:

Ayrshire & Galloway - [Scottish Raptor Study Group](#)

Berkshire - [Bisham Barn Owl Group](#)

Berkshire - [West Berkshire Countryside Society](#)

Buckinghamshire - [Bucks Owl Raptor Group](#)

Cheshire Barn Owl Conservation Groups

Cornwall - [West Cornwall Ringing Group](#)

Cumbria - [World Owl Trust](#)

Devon - [Barn Owl Trust](#)

Jersey Barn Owl Conservation Network

Lincolnshire - [Garry Steele](#)

Manchester Raptor Group

NW Norfolk Ringing Group

Northern Ireland - [Ulster Wildlife](#)

Powys Species Habitat Protection Group

Shropshire Barn Owl Group

Somerset - [Cam Valley Wildlife Group](#)

Somerset - [Hawk and Owl Trust](#)

Staffordshire Barn Owl Action Group

Suffolk Community Barn Owl Project (inc. Suffolk Owl Sanc. & others)

Sussex Ornithological Society

Warwickshire - [Stour Valley Wildlife Action Group](#)

Yorkshire - [Lower Derwent Valley NNR Barn Owl Group](#)

- [Lower Derwent Valley Skipwith Common NNR Facebook](#)

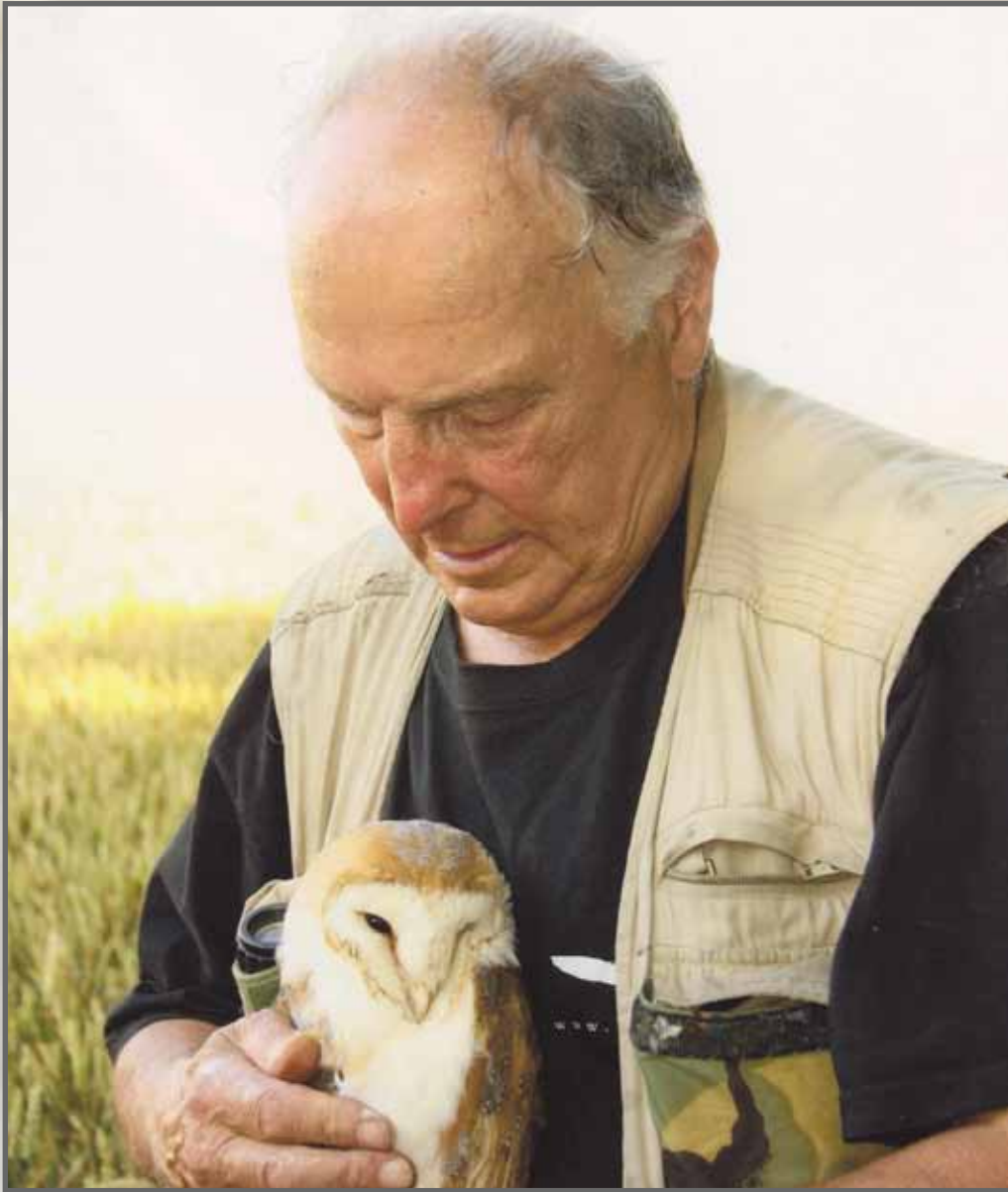
Yorkshire - [Wolds Barn Owl Group](#)



Photo: Christopher Castling



Photo: Nick Sampford



*Nigel Lewis has been monitoring Barn Owls in Wiltshire for over thirty years
Photo: provided*

Counties containing groups/projects that contributed their results.

Please note: a shaded-in county does not necessarily mean that sites were monitored across the whole county.

