

2017



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Shropshire
Barn Owl
Group



This report summarises the breeding results and activities of the Shropshire Barn Owl Group (SBOG) for 2017. SBOG is a voluntary group which has been working since 2002 to increase the breeding population of barn owls in Shropshire by providing nestboxes in areas of suitable habitat and working with farmers and other landowners to improve and conserve their habitat.

When we started out in 2002 we estimated the barn owl population in Shropshire at around 140 breeding pairs. Now, it is in the region of 200 to 220 pairs.

What We Do

- Conduct site surveys and promote the conservation of barn owls and their habitat with farmers, landowners, statutory authorities and conservation organisations
- Operate a nestbox scheme for barn owls in Shropshire to provide new breeding sites and to replenish natural nest sites lost to decay and development
- Monitor nestboxes and natural sites for occupation by breeding and roosting barn owls on an annual basis under licence from the British Trust for Ornithology
- Maintain a database of breeding sites, nestbox occupation and breeding success
- Rehabilitate injured barn owls to their natural environment
- Disseminate information through illustrated talks, an annual report and our website
- Provide advice and practical assistance to local authorities, developers and homeowners to mitigate disturbance to barn owls

SOME OF OUR ACHIEVEMENTS SO FAR

414 nestboxes installed for Barn Owls in Shropshire

2502 nestbox and natural nest sites inspected

572 successful broods in nestboxes & natural sites

1427 young barn owls produced in nestboxes

260 young barn owls in natural sites

364 site surveys completed

14 barn owls rehabilitated to the wild

The 2017 Breeding Season

Breeding success

225 barn owl chicks were produced in sites monitored in 2017. Table 1. The data is confined to those pairs successfully producing chicks and includes data from five breeding sites monitored by the Upper Onny Community Wildlife Group (UOCWG). An additional two nestboxes produced eggs but no young. Nestboxes produced 209 chicks and natural nest sites produced 16 chicks. Natural nest sites comprised a hollow branch on a black poplar tree and cavities in two oaks and an ash tree. This is the highest number of chicks produced in any one year since SBOG began installing and monitoring nestboxes in 2002 (the previous highest count was 220 in 2007) and must be attributable to a combination of optimum environmental factors in 2017, the availability of a good stock of nestbox breeding sites and the persistent increase in the barn owl breeding population.



Broods ranged from 1 to 5 chicks with an average of 2.8. Dead owlets were noted on second visits at six sites and indicates that some pairs appeared to be struggling to feed their young. Two nests, one with eggs and another with young, appeared to be predated and another with two eggs failed. One interesting roost site comprised a pipe in a building, near the apex of the roof (see photo).

Table 1. Number of chicks produced according to type of nest site in 2017
Shropshire Barn Owl Group

Figures in brackets refer to number of broods

Tree nestbox		Building nestbox		Pole nestbox		Tree cavity natural		Building natural		Other natural		Total No. chicks	Mean No. chicks
No. chicks	Mean	No. chicks	Mean	No. chicks	Mean	No. chicks	Mean	No. chicks	Mean	No. chicks	Mean		
167 (60)	2.7	37 (12)	3.0	5 (2)	2.5	12 (4)	3.0	4 (1)	4.0	0	0	225	2.8

Fourteen new breeding pairs were established in 2017 (six in 2016) of which 12 were in nestboxes and two in natural sites.

Where they bred

Adderley, Admaston, Attingham (2), Bagley, Brogyntyn, Burlton (2), Caynham, Charlton Hill, Chipnall (2), Clive, Colehurst, Colemere (3), Coton, Deefields, Doley, Dorrington, Eaton Mascott, Ellesmere (3), Gobowen, Great Ness, Harmer Hill, Haughmond Hill, High Hatton, Holly Banks, Kenley, Kynnersley (2), Leebootwood, Little Bolas (2), Loppington (2), Lower Hordley (2), Lwyn-y-Go, Lyneal, Marchamley (2), Marsden, Millenheath, Morton, Much Wenlock, New Works, Oldwoods, Pen-Y-Bryn, Pipegate (2), Red House (2), Rednal (3), Sandford, Selattyn, Sidbury, Smethcott, Soultton, Soundley, Spoonley (2), Stanley Green, Stanwardine, Tibberton, Tunstall, Walford, Welsh Frankton, Western Lullingfields, Willaston (2), Whitchurch, Woolaston, Yeaton. UOCWG also confirmed breeding at Bishops Castle (2), Eaton (2) and Hardwick.

Breeding summary 2002-2017

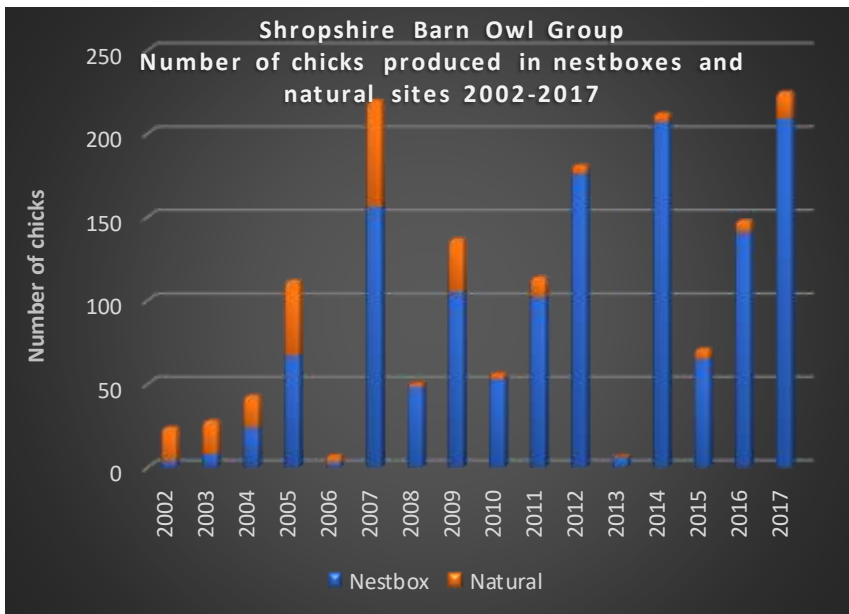
**Table 2. Breeding productivity according to type of nest site
2002-2017
Shropshire Barn Owl Group**

	Tree nestbox	Building nestbox	Pole nestbox	Tree cavity natural	Building natural	Other natural	All sites
Total Broods	343	124	16	72	14	3	572
Total chicks	994	385	48	206	44	10	1687
Mean No. chicks	2.8	3.1	3.0	2.8	3.1	3.3	2.9

1687 barn owl chicks have been produced in nest sites monitored by SBOG since 2002, 1427 in nestboxes and 260 in natural sites. Table 2. Although data on the location and number of natural nest sites is limited it is highly probable that nestboxes are now the predominant nest site for breeding barn owls in Shropshire. Internal nestboxes are marginally more productive than tree nestboxes though productivity between the different nest sites is not significantly different. Perhaps environmental factors such as increased exposure to reduced temperatures or higher predation has a greater impact on external nest sites.

The mean number of chicks produced per successful brood in Shropshire for the fifteen years 2002-2017 is 2.9. Studies elsewhere suggest that a long-term average productivity of about 3.2 young per pair is required to maintain viable populations, so the long-term productivity rate appears to be acceptable.





The wide availability of nestboxes and the firm establishment of pairs at nestbox sites means that they are increasingly producing a greater proportion of chicks compared to natural sites. A two-year cycle in breeding productivity, probably correlated with fluctuations in the field vole population, is also increasingly evident (see graph). Higher mean breeding productivity appears to be correlated with peak breeding years and therefore lower successful broods per pair are consistent with alternate troughs in breeding productivity. 2017 was unusual in that it was a peak year which followed a previous peak in 2016. Peaks are usually followed by falls in breeding productivity and two consecutive peak years have occurred only once before in 2011/2012.

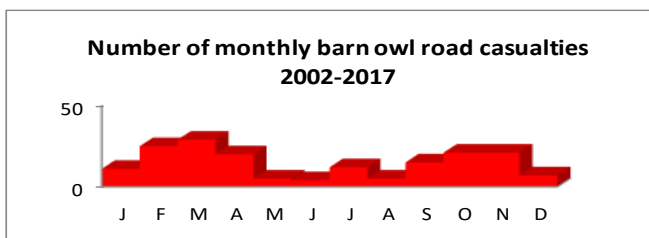
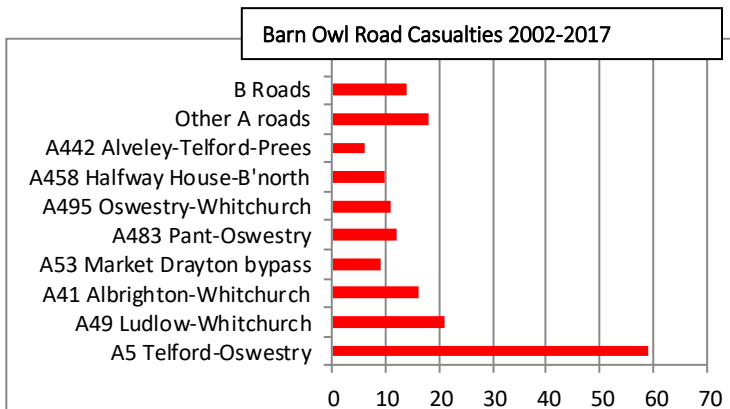
In our 2016 report we correctly predicted that 2017 would be a productive year, possibly more so than 2016. Based on previous trends, 2018 is likely to show a decrease in breeding productivity.

The indications are that whilst SBOG's survey work and data collection has undoubtedly contributed to a better knowledge of the barn owl in Shropshire, the sustained effort to replenish the loss of natural cavities by the siting of nestboxes in areas of good feeding habitat has promoted a real increase in the number of pairs.



Barn Owl Road Casualties

Eight casualties were recorded from roads in Shropshire in 2017. 94% of casualties occur on 'A' roads with relatively few casualties on 'B' roads. The A5 is the most serious threat to barn owls accounting for 59 casualties and 22% of all deaths between 2002 and 2017.



65% of the road victims relate to the winter period October to March, coinciding with juvenile dispersal and adults extending their hunting ranges. An emerging trend is the peak in March

casualties and the high mid-summer casualties in July, the latter possibly relating to dispersing juveniles from early or first broods.

Barn Owls and water troughs

SBOG recorded four cases of barn owls drowned in farmland water troughs in 2017, highlighting the problems that they face when attempting to bathe. The first report was from Selattyn where a juvenile, ringed on the 18 June in a SBOG nestbox, was recorded drowned in a trough only 400 yards away 42 days later on the 19 July. The second and third owls were found in the same trough at Alkington on the 2 September and the 19 October respectively. The land owner has now drained the trough. A fourth bird was discovered in a trough by new landowners on moving on to their property and appeared to have been there for a while. The indications are that less experienced young barn owls dispersing from their natal site are more susceptible to drowning in water troughs.



This cause of death is preventable by taking simple measures to install a wooden float in the trough without obstructing livestock. If the trough is no longer required, then drain it. Details on the construction of floats are available on the Barn Owl Trust's website at www.barnowltrust.org.uk.

David Farncombe's Milverley Barn Owl Nestbox

Last year, John Lightfoot and his wife Wendy from the Shropshire Barn Owl Group, erected a Barn Owl box at Holly Banks, Milverley, (SWT Reserve). This was done in memory of my husband, David Farncombe, who was a very keen bird watcher.



One of his birding activities was helping with the annual Wetland Bird Survey, which is carried out in the Milverley area every year. John had warned me the Barn Owl box might not be used for some time. However, at the end of June, I had an ecstatic telephone message from him - there were three baby owls in the box! Wonderful news! The following day, I watched John's gentle expertise, with Wendy's help, collect the owls one at a time using what looked like a school shoe bag. He weighed each bird and then measured their wings and their heads. He also ringed each bird. All the owls had to do now was to survive! John was optimistic, it was a good year for wood mice and voles.

I had hoped to visit the site at dusk with members of my family to maybe see the parent owls feeding their young. Unfortunately, that proved difficult to arrange. However, on Tuesday 15th August, I decided on the spur of the moment, as it was a beautiful evening, to drive over to the reserve with the hope I might see some owl activity. It was 8:30pm when I arrived. I decided to wait at the gate of the field. From this view the oak tree on which the nestbox was fixed, is straight ahead (approximately 30 to 35 metres away). Also, there is a good view of most of the field. Unfortunately, I couldn't see the box because of the thick growth of leaves. Leaning on a gate on a beautiful August evening, just looking and listening is perhaps one of those things one should do more often - it was very restful. After 30 minutes, it was starting to get dark, so I gave myself ten more minutes - I would then make my way home. I was just on the point of going when two birds, close together, suddenly flew from under the oak trees low canopy. They flew round and up to the top of the left side of the tree, then out of sight. Almost at the same time a bird flew past me about 15ft up on my left side, flew around the left side of the tree and landed in a branch on the right and stared at me for about 15 seconds and flew off. I was looking at a beautiful Barn Owl. Considering the colour of their backs and the top of their spread wings was a pale chestnut brown, I assumed the other two birds were the young. I also assumed the third owl hadn't made it. John, pointed out however, the third owl may have been the eldest in the brood and may have left the nest already. I'm so glad I made the effort to go and wait. It was a very satisfying experience. I know David would have been thrilled.

Jane Farncombe

THANK YOU

Thank you to the many farmers and landowners across Shropshire who want to see barn owls thriving on their land and who provide invaluable support and allow us to install nestboxes on their land. For reasons of site confidentiality, we cannot disclose who or where they are. For financial support this year we are most grateful to The Jean Jackson Charitable Trust, William Dean Countryside & Educational Trust, David Collin Greeting Cards and to other supporters who very kindly gave donations – we hope that you can see within this report some of the direct results of that commitment. Thank you to Clive and Gill Roberts for feeding barn owls ready for release in our mobile aviary; Paul Shearer who kindly gives us off-cuts of roofing laths for our nestboxes; Huw Ellis who lets us store our mobile aviary in his building; Tristram Pearce for regularly providing barn owl records and for the photo of a barn owl in flight; and Julian Langford for providing ringing supervision. Much of the conservation work undertaken by the Shropshire Barn Owl Group is accomplished in partnership with a variety of organisations: this year thank you to Jon Groom and members of the UOCWG for additional breeding data.

How you can help

Contact us if you would like to encourage barn owls to breed. Barn owls require large fields of permanent, ungrazed, tussocky grassland or extensive grassy margins where the grass is maintained to a height of 20-40 cm. This provides barn owls with a high density of small mammal prey which they are dependent upon.

- Contact us to arrange a site survey if you have grassy margins or headlands under DEFRA's Entry Level or Higher-Level Stewardship Scheme.
- SBOG can construct, install and monitor nestboxes for a nominal cost of £75
- Retain large, old trees to provide nest and roost sites
- Retain old barns and other farm buildings. Where they are to be developed consider incorporating an owl window and loft space for breeding barn owls
- Refrain from using highly toxic second generation anticoagulant rat poison
- Let SBOG know when natural nest sites are threatened by development or decay so that we can work with you to repair the site or install a nestbox
- Report sightings of barn owls to us or the Shropshire Ornithological Society

If you would like to see more barn owls in Shropshire why not support our work and consider making a donation to the Shropshire Barn Owl Group. Visit our website www.shropshirebarnowlgroup.org.uk to see more of the work that we do.

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