

2015



Shropshire

Barn Owl

Group



This report summarises the results and activities of the Shropshire Barn Owl Group (SBOG) for 2015. The 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.

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 for barn owls 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
- 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

393 nestboxes installed for Barn Owls in Shropshire

2175 nestbox and natural nest sites inspected

435 successful broods in nestboxes & natural sites

1077 young barn owls produced in nestboxes

237 young barn owls in natural sites

338 site surveys completed

The 2015 Breeding Season

Breeding success

71 barn owl chicks were produced in sites monitored in 2015. Table 1. As predicted following a peak year in 2014, breeding activity in 2015 was much more suppressed. Nestboxes produced 63 chicks and natural nest sites produced 6 chicks. The data is confined to those pairs successfully producing chicks. The first egg was laid on 25 April (compared to 15th March in 2014) and clutches ranged from 1 to 6 eggs. Broods ranged from 1 to 4 chicks with an average of 2.2. Three clutches were either infertile or deserted and two broods appeared to be predated. Non-breeding pairs were noted at five sites and no second broods were recorded, a phenomenon that seems to be consistent with peak breeding years (e.g. 2014). One pair nested for the first time in a pole box which had been installed just over two years earlier in November 2012. Fewer pole nestboxes are installed so it is always a welcome development when one is occupied.



Table 1. Number of chicks produced according to type of nest site in 2015

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		
48 (22)	2.1	15 (6)	2.5	2 (1)	2.0	4 (2)	2.0	2 (1)	2.0	0	0	71	2.2

Where they bred

Admaston, Bagley, Brogyntyn, Charlton Hill, Clive, Bishops Castle (2), Colehurst, Cold Hatton, Eaton, Ellesmere (2), Gobowen, Hook-A-Gate, Hordley, Morton, Much Wenlock, New Works, Rednal, Ryton, Soundley, Spoonley, Stanton Lacey, Stanwardine, Tibberton, Welsh Frankton, West Felton, Wem, Whitewell, Whitchurch, Whixall, Willaston, Woore, Yeaton.

Breeding summary 2002-2015

Table 2. Number of chicks produced according to type of nest site

2002-2015

Shropshire Barn Owl Group

	Tree nestbox	Building nestbox	Pole nestbox	Tree cavity natural	Building natural	Other natural	All sites
Total Broods	243	98	13	65	13	3	435
Total chicks	726	311	40	187	40	10	1314
Mean No. chicks	2.9	3.1	3.0	2.8	3.0	3.3	3.0

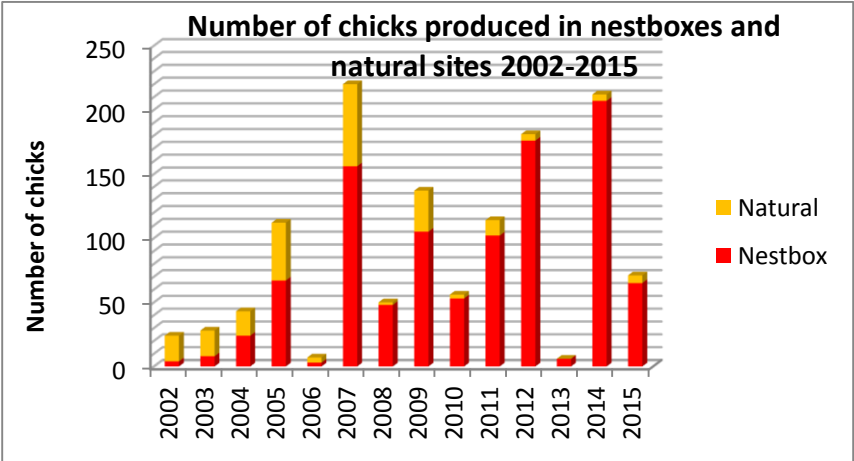
1314 Barn Owl chicks have been produced in nest sites monitored by SBOG since 2002, 1077 in nestboxes and 237 in natural sites. Table 2. Although data on the location and number of natural nest sites is limited it is highly probable that nestboxes now provide most nest sites for breeding barn owls in Shropshire. Internal nestboxes are marginally more productive than tree nestboxes and natural tree cavities are the least productive. Perhaps environmental factors such as increased exposure to reduced temperatures affects the survival of young or increased predation has a greater impact on external nest sites. Productivity between the different nest sites is not significantly different.



The mean number of chicks produced per successful brood in Shropshire for the fourteen years 2002-2015 is 3.0. Studies elsewhere suggest that a long-term average productivity of about 3.2 young per pair is required to maintain viable populations, so 2015's average of 2.2 chicks was significantly below the norm.

As the number of nestboxes increase and pairs become firmly established at nestbox sites 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 below. 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.

It is highly likely that 2016 will prove to be a more successful breeding season than 2015, though perhaps not as significant peak year as in 2014, providing there are no adverse winter weather conditions.



On Tuesday 14th July 2015, eight barn owl volunteers and the Barn Owl Officer from Ulster Wildlife travelled to Oswestry in Shropshire to spend a fascinating day with John & Wendy Lightfoot from the Shropshire Barn Owl Group. In Northern Ireland (NI) there is a very low density of barn owls in comparison to the rest of the UK. In fact we only know of three nest sites, two of which are inaccessible for ringing, so spending time with Shropshire's barn owls was definitely a break from the norm.

John met us all at our hotel late on the Tuesday night and took us to a nearby nestbox in the hope we might catch our first glimpse of a Shropshire barn owl. However, the weather was against us and the drizzling rain stopped the adults hunting. We could, however, just make out the young barn owls snoring (the begging call of the young resembles a loud pshhhhhhhh, often described as 'snoring'). This was confirmed on 28th July when John and Wendy ringed 3 owlets from that nestbox, the oldest being 50 days old.

The next morning dawned bright & clear, we got a good breakfast ready for the day ahead and met John and Wendy. John had brought along one of his nestboxes and we all had a really good look at its construction. Shropshire gets a similar amount of rainfall to NI, being influenced by the same weather fronts coming off the Atlantic, so it was interesting to see how much effort John puts into waterproofing his nestboxes which is something we have to keep in mind when building outdoor nestboxes for use in NI.



Our first stop saw us checking three nestboxes within a few fields of each other in a very picturesque part of Shropshire with a canal running through the fields. The first box, situated on a mature ash tree had been used by squirrels with no evidence of barn owls, the second box set low on an old oak tree was filled with jackdaw nest debris and four dead jackdaws! However on a mature ash tree on the opposite side of the small field was an active barn owl nest. You will have to imagine the excitement of the Northern Irish contingent at this point, most of us having never seen a barn owl chick! John and Wendy ringed two chicks, one male and one female aged approximately one week apart. It was interesting how docile the chicks were and how calm John and Wendy were in recording the information

required.

So it was back to the cars again with all the equipment – how does John do it on his own?! We travelled to an organic dairy farm, where the landowner had put up an indoor nestbox in a modern shed only a few months before. We actually flushed an adult owl from a pile of large square bales; it flew to a nearby copse of trees to watch us. Luckily the day was dry and bright and no buzzards were about so it was ok for John to proceed. There were three chicks in this box, all were safely ringed recorded and put back.

The nestbox was in another shed belonging to the same farmer, this time beside his home so a slightly busier yard. John noted a jackdaw fly out of the box as we approached and decided that the box was too high in the shed to be accessed safely. The



farmer agreed to place some of his large bales beneath the box to give John a chance to check again later, but given the jackdaws presence it was probably unlikely to house another nest. Incidentally the farmer at these two boxes was incredibly interested in barn owls, if a little bemused at this crowd of barn owl enthusiasts from NI, and happily discussed his farming practices with us – great to see successful farming and wildlife go hand-in-hand!

On to another site – this time a tree in the middle of a wheat field. There are a lot of parkland trees in Shropshire; a much less frequent sight in NI. Apparently nestboxes in parkland trees are much more successful than those on trees in a hedgerow as squirrels are less likely to take up residence. When John opened the inspection hatch it was clear it was full of nest debris, nearly up to the top of the inspection hole! There were two very mature chicks inside which John said would already be 'out of the nest', i.e. leaving the box in the initial stages of fledging. This meant they were too old to ring as there was a high possibility it would make them leave the nest too soon. This was where John's experience in such matters really shone. We were told to be as quiet as possible, one of us held the sponge (a square of upholstery sponge on the end of a long pole) over the entrance hole while John replaced the inspection hatch, then the sponge was kept over the hole while everyone moved away and after a wait to ensure the chicks would have settled the sponge was carefully removed. Luckily the chicks remained in the box.



While this was probably the trickiest visit for John it probably taught us the most – things like making the inspection hatch front easy to remove suddenly become very important when it comes to monitoring an occupied box, and what a great idea to gently cover the entrance hole to minimise the chance of a chick being flushed from the box. The farm on which this box was situated is in agri-

environment and John and Wendy expected to see many vole latrines and tunnels in the field margins. However we couldn't find any – perhaps a sign of the cyclical nature of vole populations? Not something we have to worry about in NI with no voles!

The penultimate nestbox was also the quickest – an indoor box high up in modern shed. There were no barn owls; John cleared the box of pigeon nest debris (often a problem when the box is set very high in a shed). The last box was set in the most beautiful surroundings – a traditional barn the like of which we rarely see in NI, surrounded by fields with hardly anything to indicate human habitation within view. Again, the box was an indoor box made from an old tea chest; interestingly a plastic barrel on its side within the same building was acting as a roost site for the adults as there were very few trees around. John and Wendy suspected the adults could actually be in the barrel box so with the late sunshine streaming through the open sides of the barn, we quietly watched John and Wendy at work for the last time. Three chicks with about 11 days between the youngest and eldest were all ringed and recorded, again all a good weight.

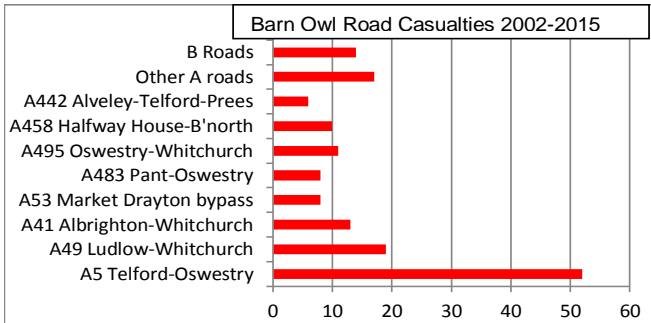
It was then time to say goodbye to Shropshire and make our journey north to the airport. We had such an amazing experience with John and Wendy; they were both so willing to answer our (many) questions and happy to pass on any snippets that would help us back home. Certainly all of us who travelled to Shropshire have been much more proactive in erecting nestboxes where appropriate and feel much more qualified to give advice. Who knows, sometime in the future ringing chicks may be part of our work here too.

Thank you so much John and Wendy, everyone involved with Shropshire Barn Owl Group and of course, those inspirational barn owl chicks!



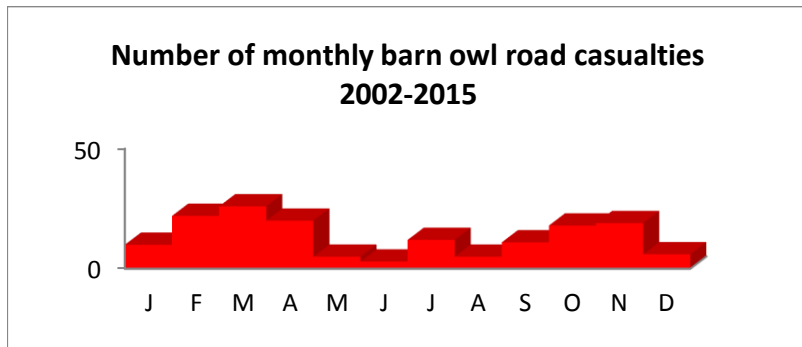
Photos. Ciaran Walsh. AntrimLens

Barn Owl Road Casualties



Thirteen road casualties were recorded from roads in Shropshire in 2015. 91% 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 52 casualties and 32% of all deaths in the last fourteen years.

68% 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.



Our First Barn Owl Belfry

SBOG recently built and installed our first barn owl Belfry – a large barn owl nestbox on legs sited directly within some excellent permanent tussocky grassland. Commissioned by a dedicated barn owl enthusiast, the structure is designed to be very durable and provides a large cavity to allow barn owls to breed and the chicks to jump around and exercise their wings in a dry environment prior - important especially with climate change and wetter weather - prior to leaving the nest site. In this way it is hoped that the young owls will be that much stronger and their chances of survival that much greater. We hope to report more about the Belfry in our next report.



THANK YOU

Much of the conservation work undertaken by the Shropshire Barn Owl Group is accomplished in partnership with a variety of organisations and we wish to express our thanks to the Upper Onny Wildlife Group and Jonathan Groom for their help this year. Thank you also to the many farmers and landowners across Shropshire 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, Mr Collin for his continued generous financial support, the Hilton-Jones Charitable Trust and to other supporters who very kindly gave donations – we are most grateful and hope that you can see within this report some of the direct results of that commitment.

We are grateful to Ciaran Walsh of AntrimLens for permission to use his photos for the Ulster Wildlife article and on our cover. Active members of SBOG in 2015 were John Lightfoot, Wendy Lightfoot, Glenn Bishton and Annette Bishton. We are grateful to Kingsley Press for printing the report.

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 20-40cm. This provides barn owls with a high density of small mammal prey**
- **Contact us to arrange a site survey if you have created grassy margins or headlands under DEFRA's Entry Level or Higher Level Stewardships 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 and, where they are to be developed, consider incorporating a loft space for breeding barn owls**
- **Refrain from using highly toxic Second Generation Anticoagulant Rodenticides**
- **Let us know when natural nest sites are threatened by development or decay so that we can work with you to protect the barn owls.**
- **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. For more information visit www.shropshirebarnowlgroup.org.uk

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