

2014



Shropshire

Barn Owl

Group



Providing nestboxes for Barn Owls and
promoting the conservation of their habitat

£1

This report summarises the results and activities of the Shropshire Barn Owl Group (SBOG) for 2014. 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 Natural England
- 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

387 nestboxes installed for Barn Owls in Shropshire

1975 nestbox and natural nest sites inspected

403 successful broods in nestboxes & natural sites

1012 young barn owls produced in nestboxes

231 young barn owls in natural sites

312 site surveys completed



The 2014 Breeding Season



Breeding success

212 barn owl chicks were produced in sites monitored by SBOG in 2014. Table 1. This is the second highest level of productivity recorded by SBOG in any year since monitoring began in 2002. Nestboxes produced 207 chicks and natural nest sites produced 5 chicks. The data is confined to those pairs successfully producing chicks. The first egg was laid on 15th March and broods were substantially larger than the normal 2.9, ranging from 2 to 7 with an average of 4.1. This is the largest mean brood size recorded in a year since we began monitoring.

Eleven second breeding attempts were made of which nine successfully produced 27 chicks. Six of the second breeding attempts were in the same nestbox as

the first attempt. Six of the chicks died in the nest or were predated. The average brood size of those second broods successfully producing young was 3.0, substantially lower than the average of 4.4. chicks for first broods. The latest estimated fledging date from a brood was 27 October (the latest fledging date in SBOG's records is 18 November 2007). One male was suspected of pairing with two females who bred in nestboxes separated only by a field. SBOG has not recorded this behaviour before, which may be something that is more frequent in prolific breeding seasons.

Table 1. Number of chicks produced according to type of nest site in 2014

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		
140 (34)	4.1	64 (15)	4.2	3 (1)	3.0	5 (1)	5.0	0	0	0	0	212	4.1

Where they bred

Bagley, Baschurch, Bridgnorth, Charlton, Childs Ercall, Chipnall. Chirbury, Cleobury Mortimer, Clive, Cold Hatton, Colehurst, Colemere, Cound, Craven Arms, Doley, Gobowen, Hook-A-Gate, Hordley, Kynnersley, Lawley, Longnor, Lower Hordley, Market Drayton, Millen Heath, Morton, Moreton Say, Much Wenlock, Pickstock, Pikesend, Sandford, Sleaf, Stanton Lacey, Soundley, Welsh Frankton, Whitchurch, Whixall, Willaston.



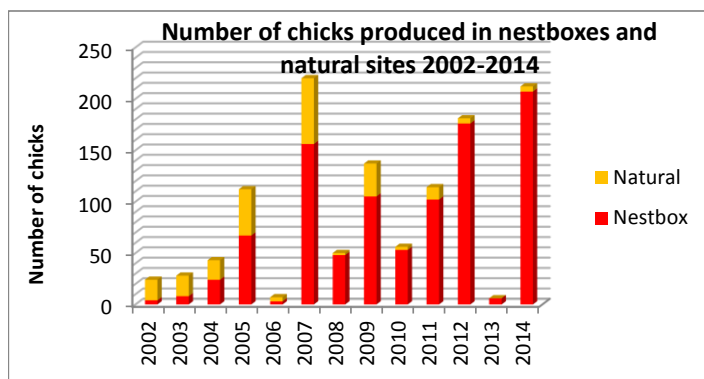
Breeding summary 2002-2014

**Table 2. Number of chicks produced according to type of nest site
2002-2014
Shropshire Barn Owl Group**

	Tree nestbox	Building nestbox	Pole nestbox	Tree cavity natural	Building natural	Other natural	All sites
Total Broods	221	92	12	63	12	3	403
Total chicks	678	296	38	183	38	10	1243
Mean No. chicks	3.0	3.2	3.1	2.9	3.1	3.3	3.0

1243 Barn Owl chicks have been produced in nest sites monitored by SBOG since 2002, 1012 in nestboxes and 231 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. Tree nestboxes are marginally less productive than internal 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 thirteen years 2002-2014 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 2014's average of 4.1 chicks was significantly

above the norm and an important contributory factor in maintaining an adequate breeding population in the long-term. The previous highest brood size was in 2007, which was, interestingly, another cyclical peak breeding season and the most productive year to date.

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. Intriguingly, comparing the exceptional breeding season of 2014 to the last similarly productive breeding season of 2007 the question as to whether there is also a longer-term cyclical factor at play is raised.

Mobile release aviary

Our new mobile release aviary was used for the first time this year on the land of Jayne and Mark Edwards who take up the story:

A young female Barn owl, possibly from a second brood of a known breeding pair of Barn Owls on the Shropshire/Staffordshire border was noticed frantically quartering a field on the 7th of October 2014 about 200 yards from a known nest site. Two days later the barn owl was found on a track bordering the same field, it was very weak and could not stand unassisted, so it was taken to the Cuan Wildlife Centre in Much Wenlock. It was here that her journey back to health would begin.

The owlet went through a gradual reintroduction to food. Initially being tube fed then hand fed. She was also treated with a Vit. D supplement. By the 19th October she was taking food for herself and was putting on weight. After some time in an outdoor aviary and a test flight at Cuan she was passed fit for the next phase of her rehabilitation back into the wild.



On the 6th of November, John and Wendy from the Shropshire Barn Owl Group positioned the mobile aviary about 15 feet from the known nest site in her original territory and the owl was brought from Cuan. Two dead day old chicks were placed in the feed box and the Barn owl was placed in the nest box contained in the aviary. The aviary was

monitored from a distance and just over 2 hours later the owl was seen sitting on a perch in the aviary.

Initially feeding took the form of three dead chicks being placed in the feed box each day at about the same time as she would have been fed at Cuan. Over a period of time mice

were introduced into her diet to try and replicate the food source she would be hunting in the wild (she still had three food items per day, a mixture of mice and chicks).

To try and reduce the level of human contact she was exposed to, the feed time was gradually moved to earlier in the day, when she was likely to be in her nest box and not in the aviary. This minimised the chances of her seeing anyone. The hope was that she would adapt to a more natural feeding time, taking her lead from the sounds of the other owls and wildlife in her surrounding area.

She took to all this, and on the 19th of November a period of dry weather was noted in the long term forecast for the area. Food was placed in the box as normal and the lid of the aviary was raised at 3.30pm. The aviary was watched until 4.45pm by which time it was starting to grow dark and there had been no sighting of her. The next morning the feed box was checked and found to be empty and she had taken her leave. Food continued to be placed in the box for a further week in case she needed to supplement her diet, but none was taken.



Our Thanks are extended to the Cuan Wildlife Centre and John and Wendy of the Shropshire Barn Owl group for all the help and assistance in the rehabilitation process of this owl. The mobile aviary has been proven to be invaluable on this first and very successful outing.

Jayne & Mark Edwards

SBOG is extremely grateful to the trustees of The Jean Jackson Charitable Trust whose generous award enabled us to fund the mobile aviary project. We would also like to thank P J Evans Agricultural Engineers, West Felton, Oswestry Tel. 01691 610377 who did us a good deal on the purchase of a quad bike which greatly assisted the siting of the aviary.

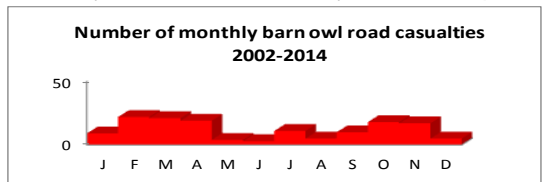
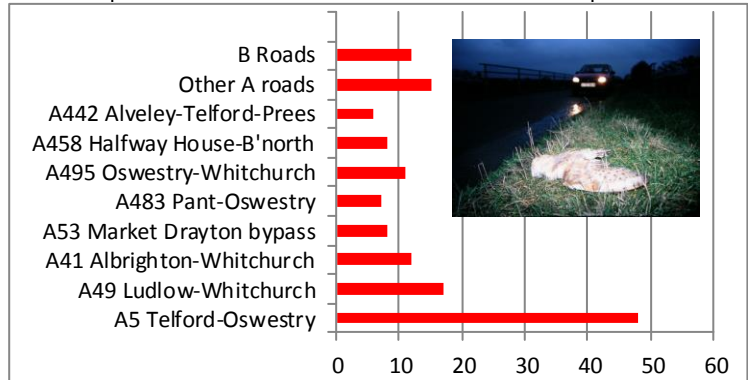


Barn Owl Road Casualties 2002-2014

Barn Owl Road Casualties

Seven road casualties were recorded from roads in Shropshire in 2014. 92% 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 48 casualties and 34% of all deaths in the last thirteen years. 64% 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 July casualties, which may relate to dispersing juveniles from early or first broods. In fact, one July casualty related to a young bird ringed at Millen Heath and just 59 days old. SBOG's policy is not to install nestboxes within one kilometre of major roads in order to minimise the risk of barn owls coming into contact with vehicles.



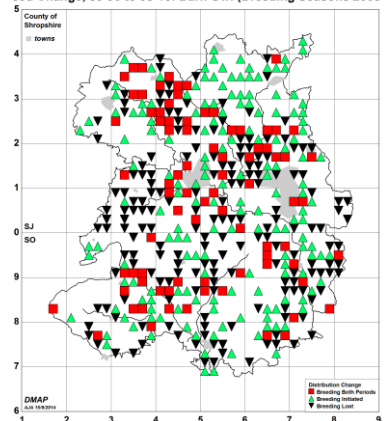
The new Shropshire avifauna

Preparation of the Shropshire Ornithological Society's new *Birds of Shropshire* avifauna is now progressing well. The results will help shape the conservation priorities of birds in the county for the next 20 years.

The change in the Barn Owl breeding population since the 1992 Shropshire Atlas is particularly informative and has identified declines and gaps – particularly the lowlands of west-central Shropshire around Westbury, east of Telford and the south-east – where we should target nestbox schemes and habitat conservation. The map also highlights strong gains, such as in the north-east, where SBOG has been particularly active in installing nestboxes.

Due for publication in 2015, the cover price of *The Birds of Shropshire* will be £45, available at a pre-publication offer price of £25. See Shropshire Ornithological Society website www.shropshirebirds.com for details.

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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 following for their support during the year: Cuan Wildlife Rescue. 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 William Dean Trust, to Mr Collin for his regular financial support and to other supporters who very kindly gave donations – we are truly grateful and hope that you can see within this report some of the direct results of that commitment. A very big thank you to The Jean Jackson Charitable Trust which provided us with a substantial award, enabling us to pursue our mobile release aviary project and to further the rehabilitation of injured owls back to their natural environment.

Several 'silent' helpers have provided invaluable support during the year, either willingly or by default! They are Jayne & Mark Edwards. Active members of SBOG in 2014 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 £70**
- **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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