

*Shropshire*

**Barn Owl**

*Group*



**2016**



This report summarises the results and activities of the Shropshire Barn Owl Group (SBOG) for 2016. 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.

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 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 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
- 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**



**405 nestboxes installed for Barn Owls in Shropshire**

**2245 nestbox and natural nest sites inspected**

**493 successful broods in nestboxes & natural sites**

**1218 young barn owls produced in nestboxes**

**244 young barn owls in natural sites**

**344 site surveys completed**

**10 barn owls rehabilitated to the wild**

# The 2016 Breeding Season

## Breeding success

148 barn owl chicks were produced in sites monitored in 2016. Table 1. Nestboxes produced 141 chicks and natural nest sites produced 7 chicks. The data is confined to those pairs successfully producing chicks and includes data from six breeding sites monitored by the Upper Onny Community Wildlife Group (UOCWG).

Clutches ranged from 1 to 5 eggs. Broods ranged from 1 to 4 chicks with an average of 2.5. An additional three nestboxes produced eggs but no young: two of the sites were probably predated. One second brood was recorded, a phenomenon that seems to be consistent with peak breeding years (see 2014).

A pair in a private nest box at Tern Hill monitored by an internal camera produced their first egg on the 2 April. Two more eggs followed and the first hatched on the 30 April, the second on 5 May and the third on 8 May. The pair fed mainly on field mice rather than the usual primary prey – field vole.



**Table 1. Number of chicks produced according to type of nest site in 2016**

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		
101 (40)	2.4	37 (14)	2.6	3 (1)	3.0	7 (3)	2.3	0 (0)	0	0	0	148	2.5

A nestbox installed at Burlton only on the 1 May 2016 had an adult female barn owl with at least two chicks about ten days old on 9 August – probably SBOG's quickest occupation by a successful breeding pair. Natural tree sites occupied comprised two oaks and a sycamore. Three chicks aged 56 days were still in a nestbox on 2 October while fourteen day old chicks were present in one nestbox on 28 August and, if successful, will have fledged as late as mid-October.

Six new breeding pairs were identified of which four were in nestboxes and two in natural sites.

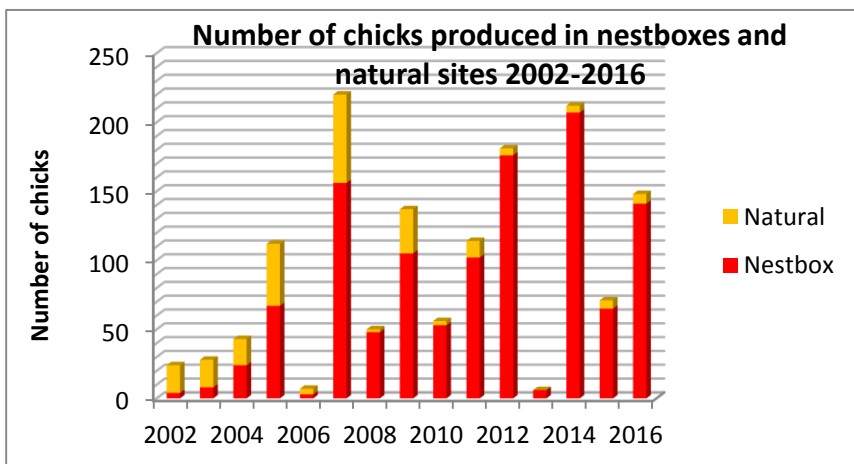
## Where they bred

Attingham, Admaston, Bromley, Brongytyn, Burlton, Bagginswood, Colemere, Colehurst, Clive, Chipnall, Childs Ercall, Chirbury, Charlton, Coton (2), Cound, Deefields, Doley, Dorrington, Eaton Mascott, Ellesmere (3), Gobowen, Haughmond Hill, High Ercall (2), Hollinswood, Hook-A-Gate, Hordley, Kynnersley, Little Bolas, Longnor, Lyneal Wood, Marchamley, Marsden, Millen Heath, Morton, Much Wenlock, New Works, Rednal, Ruewood, St. Martins, Sandford, Shifnal, Sleaf, Soundley, Spoonley (2), Stanley Green, Stanwardine, Stipperstones, Welsh Frankton, Weston Lullingfields, Whitchurch, Willaston and Woore. UOCWG also confirmed breeding at Bishops Castle (3), Eaton (2) and Hardwick.

## Breeding summary 2002-2016

	<b>Tree nestbox</b>	<b>Building nestbox</b>	<b>Pole nestbox</b>	<b>Tree cavity natural</b>	<b>Building natural</b>	<b>Other natural</b>	<b>All sites</b>
Total Broods	283	112	14	68	13	3	493
Total chicks	827	348	43	194	40	10	1462
Mean No. chicks	2.9	3.1	3.0	2.8	3.0	3.3	2.9

1462 barn owl chicks have been produced in nest sites monitored by SBOG since 2002, 1218 in nestboxes and 244 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 the predominant nest site 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 or higher predation has a greater impact on external nest sites. Productivity between the different nest sites is not significantly different.



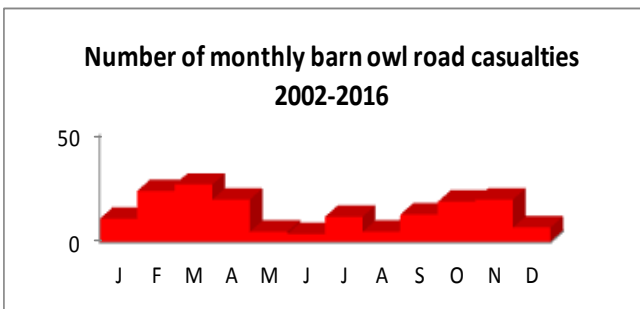
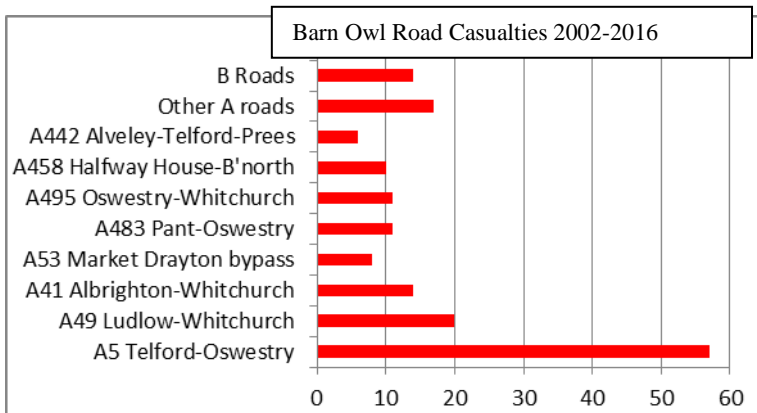
The mean number of chicks produced per successful brood in Shropshire for the fourteen years 2002-2016 is 2.9. Studies elsewhere suggest that a long-term average productivity of about 3.2 young per pair is required to maintain viable populations, so although 2016's average of 2.5 chicks was a little below the norm the long-term productivity rate appears to be acceptable.

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 previous page). 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.

We predict that 2017 will be a productive breeding season, possibly better than 2016, as seen in 2012 when increased chick productivity followed a peak year in 2011.

## Barn Owl Road Casualties

Ten casualties were recorded from roads in Shropshire in 2016. 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 57 casualties and 33% of all deaths in the last fourteen 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 peak in March casualties and the high mid-summer casualties in July, the latter possibly relating to dispersing juveniles from early or first broods.

## The Wrong Type Of Nestbox!

In January 2015 we began the massive task of renovating our derelict barns in rural Shropshire. As animal lovers we were very happy to work with the ecologist to ensure wildlife was protected as much as possible. We were indeed delighted to have two species of bat and occasional sightings of a fabulous barn owl on site.

We were advised to fit an owl nesting box high in an established tree in a quieter part of the site. This box was duly purchased on the internet and fitted a few months before any building works commenced. The box cost £75- had a regular hole and a viewing sliding door. Although large, it was shallow in depth and had no ledge on the outside. We were advised by the ecologist that it was highly unlikely that our nesting box would be used. We were very surprised therefore when two baby owlets were spotted soaking wet and sitting on the ground, one morning in mid-September. A third owlet had sheltered under a derelict shed. We were extremely lucky to spot the owls and that a predator had not taken them in the night.



Quickly the ecologist was called who put us in touch with John from The Shropshire Barn Owl Group. Our neighbours were astounded when presented with three fluffy baby owlets to dry out in a box near the aga and to weigh and feed!! Owls are not waterproof so it was important to dry them quickly. Everyone was in awe of these fluffy very cute little birds! John advised to return the owlets to their nesting box. However we were now assuming that our orphans had possibly left the nest due to lack of food. It appeared the parents may have sadly been scared away or come to harm.



John advised that the box purchased was completely unsuitable and due to the absence of a ledge had caused the owlets to fall to the ground. Also the box was not deep enough to allow the birds to practice jumping and moving prior to learning to fly. A ledge allows the owls to hop out at night and practice jumping and flapping in the tree branches. John kindly quickly visited the box to change it for the correct and safe version. We did contact the company who sold us the incorrect model - sadly they have failed to respond.

Our baby owlets varied in age and maturity as eggs are laid and hatched one at a time. It was really clear that the younger owls were far more fluffy. Quickly feathers developed as fluffy down was lost and beautiful markings emerged. We had one male and two females, distinguished by brown marks under their wings. A camera was situated in a nearby tree but we were never able to establish if the parents were visiting the owl box to feed their young. We therefore fed the owlets day old dead chicks every evening at dusk. It's fascinating to hear their characteristic calling for food- a very unusual sound!! One of our owls fully matured and left our nesting box. We expected the others to follow in the proceeding weeks.

It has been an absolute privilege to witness the development of these incredible and elusive birds. Our only wish is that they return to our new home again in the future.

**Alison & Melvin Mennell. Little Bolas**

## Longevity Nestbox

In 2016 we designed a new style of nestbox using Stokboard. Stokboard is made from recycled plastic sheet which is not susceptible to rot. Nestboxes made from this material will possibly require less maintenance and last longer.

The Longevity Nestbox will be trialled in 2017 and whilst there are advantages over wood in terms of the longevity and maintenance of the nestbox we must be sure that nestboxes built from stokboard do not cause any undue problems for barn owls - for example, possible increased internal humidity.



## Mobile release aviary



We continued to rehabilitate injured and young barn owls back to the wild using our mobile release aviary. This was built in 2014 with funds generously provided by The Jean Jackson Charitable Trust and it is proving a great success. To date we have rehabilitated ten barn owls back to the wild – barn owls that but for SBOG's intervention would not have had the opportunity to go on and create viable breeding pairs and to produce more barn owls.

One barn owl was in the process of being gradually released from the mobile aviary at Wykey when another barn owl was taken in and in great need of the aviary. The Wykey resident had been fed two-day old chicks every night and after the customary fourteen days was given his freedom. Unfortunately, he was reluctant to leave and kept on returning to the aviary, attracted by the regular feeding pattern and supply of food! The new barn owl patient needing care had a broken wing and with the aviary still occupied we came up with the idea of using a food box on a post to entice the barn owl away from the aviary. The landowner continued to put food in the box on the post, allowing us to retrieve the aviary, and the male barn owl was most content to come back for his post-box supper each night.



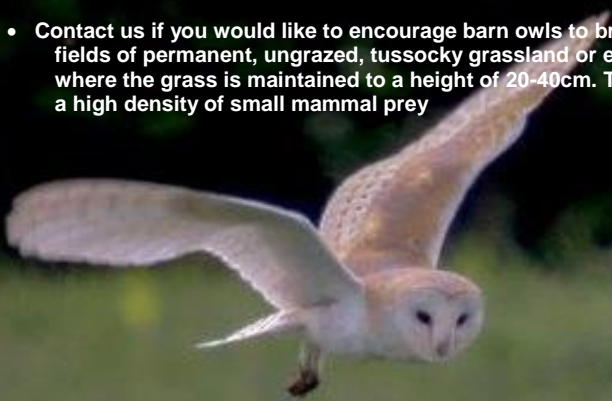
# THANK YOU

Thank you 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, William Dean Countryside & Educational Trust, Mr Collin 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 John Edwards and John James for invaluable help with rehabilitating barn owls on their land. We are extremely grateful to Tristram Pearce for permission to use his photos on pages 2 and 8. 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. Shropshire Falconry kindly printed the report. Active members of SBOG in 2016 were John Lightfoot, Wendy Lightfoot, Glenn Bishton.

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## 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 an owl window and 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 repair the site or to 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](http://www.shropshirebarnowlgroup.org.uk) to see the work that we do.

### Contacts

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