



Shropshire
Barn Owl
Group



2020

This report summarises the breeding results and activities of the Shropshire Barn Owl Group (SBOG) for 2020. 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.

In 2002 the barn owl population in Shropshire had been in decline for over half a century and was estimated at around 140 breeding pairs. Now, it is in the region of 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 and breeding success
- Rehabilitate injured barn owls to their natural environment
- Disseminate information through an annual report, website and talks
- Provide advice and practical assistance to local authorities, developers and homeowners to mitigate disturbance to barn owls

SOME OF OUR ACHIEVEMENTS SO FAR

442 nestboxes installed for Barn Owls in Shropshire

3128 nestbox and natural nest sites inspected

743 successful broods in nestboxes & natural sites

2199 young barn owls produced in nest sites

406 site surveys completed



The 2020 Breeding Season

Breeding success

We expected 2020 to show a decline in breeding activity following three successful peak years, but it was not by any means the worst year. The weather possibly contributed to a difficult breeding season, the start of the year proving to be one of the wettest, but warmest, winters on record with persistent rainfall and sodden ground in January and February. Low rainfall in April and May, with May recording the driest May in England but the sunniest month on record in the UK, restricted the growth of grass and much went brown. This probably affected field vole numbers.



195 nestboxes and natural sites were monitored. Breeding (at least one egg laid) occurred in 69 (35.3%) of the sites. The breeding data in Table 1 is confined to those pairs successfully producing chicks and includes data from four successful breeding sites monitored by the Upper Onny Community Wildlife Group (UOCWG). 139 chicks were successfully produced in 55 (28.2%) of the sites, an average of 2.5 chicks. Of those chicks produced, 27 were found dead in the nest on the first visit or missing on a second inspection, presumed predated or consumed by their parents or siblings. An additional 14 sites held a single adult or non-breeding pair. Broods ranged from one to four chicks. No second broods were recorded, which is typical in trough years. Ten new pairs were recorded, which is welcoming news.

Table 1. Number of chicks produced according to type of nest site in 2020
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		
106 (40)	2.6	21 (10)	2.1	4 (2)	2.0	8 (3)	2.6	0	0	0	0	139 (55)	2.5

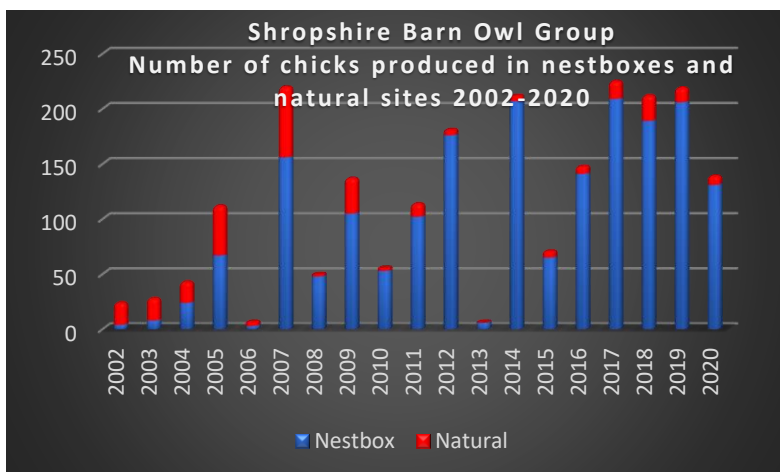
Breeding summary 2002-2020

**Table 2. Breeding productivity according to type of nest site
2002-2020
Shropshire Barn Owl Group**

	Tree nestbox	Building nestbox	Pole nestbox	Tree cavity natural	Building natural	Other natural	All sites
Total Broods	463	153	21	87	16	3	743
Total chicks	1361	473	61	247	47	10	2199
Mean No. chicks	2.9	3.0	2.9	2.8	2.9	3.3	2.9

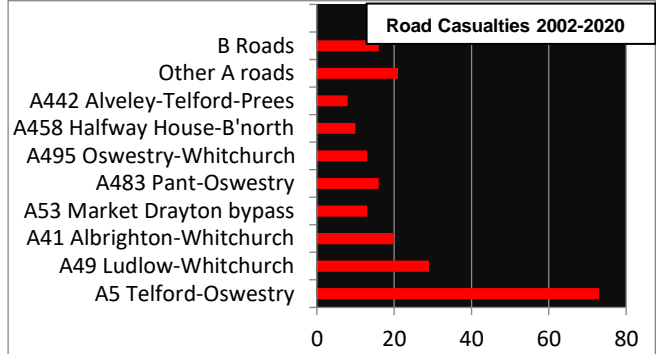
2199 barn owl chicks have been produced in nest sites monitored by SBOG since 2002, 1895 in nestboxes and 304 in natural sites. Table 2. Although data on the location and number of natural nest sites is limited it is highly probable that nestboxes are now the predominant nest site for breeding barn owls in Shropshire and produce more young than natural sites.

The mean number of chicks produced per successful brood in Shropshire for the nineteen years 2002-2020 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 productivity rate for Shropshire's barn owls appears to be encouraging.



Barn Owl Road Casualties

Nineteen casualties were recorded on roads in Shropshire in 2020. Owls were located either directly on the road or on the central reservation or grass verge. 92% of casualties between 2002 and 2020 have occurred on 'A' roads with relatively few casualties on 'B' roads. The A5 is the most serious threat to barn owls accounting for 73 (33%) of casualties.



Number of monthly barn owl road casualties 2002-2020



63% of road victims occur in the winter period October–March, peaking in March and probably arise from juvenile dispersal. Adult barn owls are site faithful and highly sedentary, but juveniles make short-distance dispersal movements from their natal areas, although some make longer movements, usually by December. An emerging trend is a peak in casualties in March.

Kestrel nestboxes

With some spare ply available from the barn owl nestboxes John Lightfoot made a couple of kestrel-type nestboxes this year and installed them in north Shropshire. Both were successfully occupied by breeding kestrel. Three more kestrel chicks were found in a barn owl box and four in a natural tree site.



Kestrels are amber-listed due to a decline in their breeding population, so it is rewarding to assist them where we can. Other bird species that have successfully bred in our barn owl nestboxes over the years include tawny owl, little owl, stock dove, jackdaw, feral pigeon and mandarin duck.

Five-star accommodation for Barn Owls

Having always been interested in wildlife and conservation, when I found out about the Shropshire Barn Owl Group and the work they do, I thought it would be a great idea to put up a Barn Owl box at home. Glenn and John duly came and after much consideration of the best location and siting of the box, decided upon the best tree, a mature Ash and subsequently installed a box which can only be described as five-star accommodation for Barn Owls! The tree is in a hedge boundary of an arable field, which is bordered by a wildflower headland. In the vicinity are a couple of plots sown with a farmland bird seed mix for winter supplementary feeding and a wildflower meadow.



Thus, began in 2013 our long story of watching and waiting and hoping that a Barn Owl would come by and take a liking to this desirable residence. The first few years came and went with few sightings and little evidence of occupation. It was not until Easter Monday 2016 that I was thrilled to see a Barn Owl sitting on the shelf of the nestbox. Within a week or two, more excitement when two owls were seen together on the shelf and the realisation that this pair had made the box home.

The lovely spring weather we had at Easter and in early spring turned bad for quite some time and I remember what seemed like endless cold, rainy and windy nights which would not have been good for Barn Owls. I'm sad to say this early part of the story did not end well, and when Glenn and John came to check the box in July, they found cold eggs which were sadly days away from hatching.



In 2017, imagine our dismay when a pair of stock doves decided to take up residence in the box.! Glenn suggested that a second box might be possible in an adjacent tree, in the hope that both species could live in neighbourly harmony. John and Glenn returned in March 2018 to install a second box. During Spring 2018, we were able to see lots of Barn Owl activity, exploring both boxes, as the stock doves had temporarily vacated. In June 2018, Glenn and John came to check both boxes. They confirmed that there was a male roosting in the older nestbox and also some Barn Owl pellets in the new box. Great news, but that was as far as things went that year.

In April 2019, in spite of a pair of stock doves eying up the boxes again, we were delighted to see a pair of Barn Owls had taken up residence in the original box. During that spring and early summer, some evenings at dusk, I would sit in the comfort of my car on the other side of the field with my binoculars and a large mug of tea! I was able to watch a lot of owl action, with much flying to and from the box. When Glenn came to check the box in early July, we were delighted to discover there were three young Barn Owls around three or four weeks old. A fabulous result after many years of hoping!



Glenn and John came back in August to weigh, measure and ring the young ones and they were pleased to report that the young owls were a good size and weight. In September 2019, on a calm and still sunny evening, we were treated to the wonderful and memorable sight of all three young owls flying together around the field near their box. That was probably the last time we saw them before they dispersed in the autumn. Though they did not breed in 2020 I have my fingers crossed for 2021!

Lorely Francis

Breeding success of the Barn Owl *Tyto alba* in Shropshire 2002-2019: a report by the Shropshire Barn Owl Group



A report published in The Shropshire Bird Report 2019, and also available on our website, summarises the results of our conservation work since 2002. Some of the key findings are:

- Barn owls are well established on their breeding sites in February and most eggs are laid in late April and May. The earliest date of the first egg was 7 Mar, in 2007.
- 85% of broods and 85% of chicks were produced in nestboxes.
- The mean number of chicks produced was 2.9, so the long-term productivity rate for Shropshire's barn owls appears to be viable.
- The average lapse time for the occupation of a nestbox by a breeding pair from a sample of records is 17 months. One new nestbox held barn owl chicks within three months.
- Four tree species have been utilised as breeding sites – ash, English oak, sycamore and black poplar. Ash (48%) and oak (48%) were most frequently used.
- Natural nest sites in buildings have comprised a cavity behind a block wall in an old farm building, a gap between bales in a Dutch barn, the floor of a ceiling in a disused chapel, an old water tank in a disused farm building and another in a world-war 2 ammunition store building, the chimney of a ruined building and the apex of a roof in a derelict industrial building.
- A cycle of peaks and troughs in annual breeding productivity, linked to the barn owls primary prey, the short-tailed field vole, is increasingly evident.
- Breeding in peak years is typified by early laying dates, a high number of broods and chicks and second broods.
- Trough years are characterised by pairs not attempting to breed or abandoning attempts, low clutch and brood sizes and high egg failure and chick mortality.
- The sustained effort to replenish the loss of natural cavities by the siting of nestboxes in areas of prey-rich habitat has promoted a real increase in the number of pairs.



In the farmed landscape the signs are encouraging. SBOG has seen a definite expansion in grass margins and headlands on arable farmland under the agri-environment schemes. As they mature and are colonised by field voles, and, as long as the nestbox programme remains in place, SBOG is optimistic that barn owls can continue to recover.

Habitat loss and degradation, decay of old tree nest sites, the renovation and dilapidation of farm buildings, adverse winter conditions, climate change, rodenticides and road casualties, all continue to impact the barn owl population. Some of these factors can be mitigated but it is a sobering thought that three quarters of Britain's barn owl population now use nestboxes for breeding. But there is a caveat. Aside from maintaining sufficient funding to continually install and replenish nestboxes, existing habitat must be safeguarded. Continued funding, targeted through agri-environment schemes following the UK's exit from the EU, is essential for grassy headlands and margins. Reduced mowing of the miles of road verges along quiet country lanes will enhance their feeding habitat and compliment the farmland margins. In the longer term, oak and ash trees continue to be lost due to decay and there is an urgent need for a hedgerow tree planting programme to ensure a sustainable supply of natural nest and roosting sites in the distant future.

Thank you

Thank you to the farmers and landowners across Shropshire who want to see barn owls on their land and who provide invaluable support in allowing SBOG to install nestboxes. 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 Countryside & Educational Trust and David Collin Greeting Cards and the many landowners who contribute to the nestbox costs. Without this financial support we could not do what we do for barn owls.

Thank you to: Mathew Manton for the nestboxes he constructed; Ray & Lorna Bailey for the mobile release site; Paul Homes APHA for post-mortems; Kingsley Press for printing the reports; Steve Dawes for the cover photo and Tris Pearce page 8 photo; Jon Groom and members of the UOCWG for additional breeding data; Tris Pearce, Dave Ellis, Rob Wilcox for records; Lorely Francis for her contribution in this report; Wendy Lightfoot for her invaluable contribution to the group.

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 margins where the grass is maintained to a height of 20-40 centimetres. This allows their main prey, field voles, to thrive in a thick litter layer at the base of the grass.

Mowing will destroy the litter layer and should be avoided. Instead, top to a height of around 13 centimetres above ground level between mid-July and the end of October.

Contact us to arrange a site survey

SBOG can build, install and monitor nestboxes for a nominal cost of £130

Retain old, decaying trees to provide nest and roost sites

Retain old barns and other outbuildings

Incorporate an owl window and loft space in barn conversions and developments

Refrain from using highly toxic second-generation anticoagulant rodenticides (rat poison)

Tell us when natural nest sites are threatened by decay or development 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

Visit our website www.shropshirebarnowlgroup.org.uk or Facebook site

If you would like to see more barn owls in Shropshire, support our work and consider donating or leaving a legacy to SBOG

Contacts:

John Lightfoot. Yew Tree Cottage, Stanwardine, Baschurch, Shrewsbury, Shropshire SY4 2HB. 01939 261141. Mob.07967 878147

Email: john.lightfoot10@btinternet.com

Glenn Bishton. Email: glennbishton@hotmail.co.uk