

2013

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 2013. The SBOG is a voluntary group and 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 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 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
- Act as a lead partner in the Shropshire Barn Owl Biodiversity Action Plan
- Give illustrated talks, produce an annual report and maintain a website
- Provide advice and practical assistance to local authorities, developers and homeowners to mitigate disturbance to barn owls

SOME OF OUR ACHIEVEMENTS SO FAR

381 nestboxes installed for Barn Owls in Shropshire



275 successful breeding attempts in nestboxes

805 young barn owls produced in nestboxes

226 young barn owls in natural sites

296 site surveys completed

The 2013 Breeding Season

The Nestboxes

Seven nestboxes supported breeding pairs of barn owl in 2013 and five were occupied by roosting birds at some point in the year. Table 1 includes both successful and unsuccessful breeding attempts. The occupancy rate of 4% for breeding barn owls was significantly below the average occupancy rate for Shropshire of 16% and the second lowest breeding occupancy rate since our records began in 2012 and the lowest since the very poor breeding season of 2006. The nestbox occupancy rate for both breeding and roosting barn owls combined was 8% and was also significantly lower than the average occupancy rate of 30%. The average yearly nestbox occupancy rate is greater for tree nestboxes, 31%, than building nestboxes, 28%, and pole nestboxes, 30%.



Table 1. Nestbox occupation by Barn Owls in 2013

Total No. nestboxes monitored	Tree				Building				Pole				% of nestboxes occupied by breeding pairs	% of nestboxes occupied by breeding and roosting birds
	No. Boxes	Breeding	Roosting	%	No. boxes	Breeding	Roosting	%	No. boxes	Breeding	Roosting	%		
148	103	6	1	6	35	1	1	5	10	0	3	30	4	8



Where they bred

The SBOG confirmed barn owls breeding in nestboxes and natural sites monitored by the group at Chirbury, Marchamley, Millen Heath, Soundley, Whitchurch, Whitewell and Whixall.

Breeding success

Six barn owl chicks were produced in sites monitored by SBOG in 2013. Table 2. This is the lowest level of productivity recorded by SBOG in any year since monitoring began in 2002. Nestboxes produced 6 chicks and natural nest sites produced no chicks. The data is confined to those pairs successfully producing chicks. Broods were exceptional small and ranged from 1 to 2 chicks, mean 2.0.

Table 2. Number of chicks produced according to type of nest site in 2013

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		
6 (3)	2.0	0	0	0	0	0	0	0	0	0	0	6	2.0

Breeding summary 2002-2013

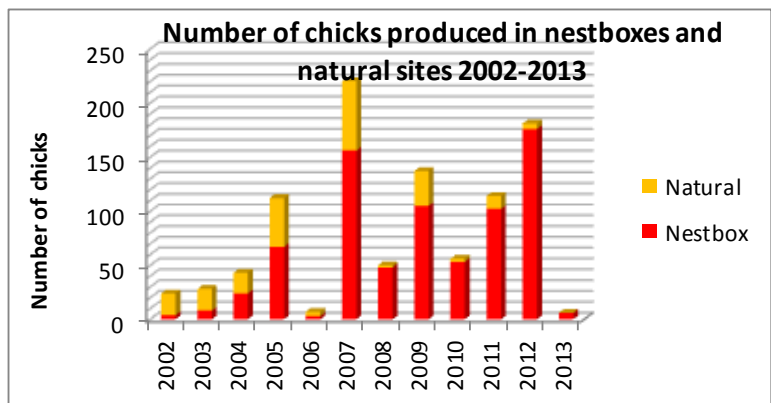
1031 Barn Owl chicks have been produced in nest sites monitored by SBOG since 2002, 805 in nestboxes and 226 in natural sites. The mean number of chicks produced per successful brood in Shropshire for the eleven years 2002-

2013 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 2013's average of 2.0 chicks was significantly below the norm and not sustainable in maintaining an adequate breeding population in the long-term.



mice rather than the preferred field vole.

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 disastrous breeding season of 2013 to the last similarly poor breeding season of 2006, the question as to whether there is also a longer-term cyclical factor at play is raised.



Mobile Barn Owls

SBOG is frequently called upon to assist with the rehabilitation of Barn Owls that have previously been rescued, for example by Cuan House animal hospital in Much Wenlock, which does a tremendous job in taking in injured and rescued birds and other wildlife. With this in mind we constructed (that is, John Lightfoot constructed) a mobile release aviary this year following guidelines laid down by the Barn Owl Trust.



Adult barn owls are taken back to their home range and released whilst owls rescued as young birds and that have never been independent can be taken to any area of suitable habitat. The release process is a gradual one and involves towing the aviary to a site supporting suitable habitat and feeding the owl in the aviary for at least two weeks. Food is placed in the lower food box and water in a bowl on the floor. The owl is then placed inside the roosting box above the food box. The sheet metal sides prevent cats from climbing the aviary and stealing the owl's food.



This gradual process allows the bird to develop a feeding pattern and to become accustomed to its surroundings. Once the bird appears to be suitably nourished and ready to go the roof is opened on a fine day at dusk and locked into position. Feeding continues until the owl stops returning to the aviary for food. At this point we have to assume that the bird is hunting successfully and the aviary can be withdrawn from the site.



In constructing the aviary we didn't get much change out of £800 and feeding the owls will be a big commitment. But we think it is worth it and it really will give rescued wild barn owls the best opportunity of being successfully rehabilitated and returning to the wild to create another much needed and viable breeding pair.



BARN OWL GRASSLAND

BARN OWLS NEED UNGRAZED, PERMANENT, TUSSOCKY GRASSLAND

It is often assumed that barn owls simply require rough grassland and, unfortunately, from this it is inferred that any rough grazing is suitable. But this is **not** the case. Barn owls in fact require rough grassland which is ungrazed, permanent and tussocky.

TUSSOCKY MARGINS ARE GREAT FOR BARN OWLS

The structure of the grass is important and should comprise a thick sward 20-40 cm high which is largely unmanaged to allow a dense thatch of fallen stems and leaves to develop at the base of the tussocks. The litter-layer must be at least 7cm deep to create shelter and nest places for field voles, the barn owls primary prey.

Suitable tussock forming perennial grasses include false oat-grass, timothy grass, cocksfoot and meadow foxtail. A mix that incorporates some softer, less fibrous grasses such as Yorkshire fog, smooth meadow grass, meadow grass, small cat's-tail, sweet vernal grass or velvet bent to provide nutritious food for voles is preferable.

Hedgerows and other field margins provide habitat for field vole and other small mammals such as wood mice and common shrew and are important foraging areas.



! DO NOT CUT!

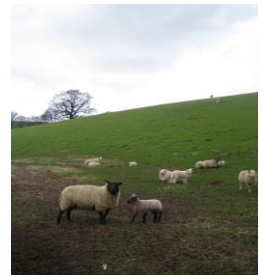
It's grassland and it's green but it's cut too often and too low. Grassy margins sown around arable fields under the agri-environment schemes are an increasing and valuable hunting habitat for barn owls but annual cutting does not allow field voles to settle. Margins cut low and annually are of no value to barn owls and of little value to other wildlife.

Once established, cut no more than once in five years, never below 130mm and never

between 1st March and 31st August.

SHEEP AND BARN OWLS DO NOT MIX

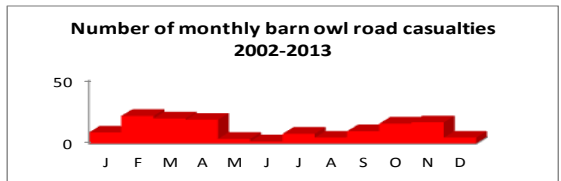
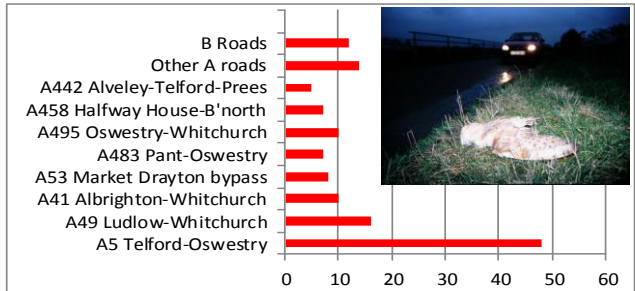
Sheep fields do not support field voles because the grass is grazed too low. No field voles means no barn owls. Barn owls do not like intensively grazed pasture, silage fields and rough grazing which are poor or transient habitats.



Barn Owl Road Casualties 2002-2013

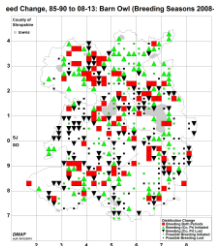
Barn Owl Road Casualties

Nine road casualties were recorded from roads in Shropshire in 2013. 91% of casualties occur on 'A' roads with relatively few casualties on 'B' roads. The A5 is the most serious threat to barn owls, especially the dual-carriageway section through Shrewsbury, accounting for 48 casualties and 32% of all deaths in the last twelve years. 64% of the road victims relate to the winter period October to March, coinciding with juvenile dispersal and adults extending their hunting ranges. 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.



Shropshire Bird Atlas

Fieldwork for the Shropshire Bird Atlas - mapping the distribution of birds across the County, in winter and in the breeding season – is now complete. For many species it will show that massive changes have occurred in their population and distribution. The results will shape conservation priorities in the County for the next 20 years and form the basis of the new *Birds of Shropshire* avifauna.



The change in the Barn Owl breeding population between the 1993 Atlas and the 2007-2013 Atlas is particularly informative. Although breeding occurred in several tetrads during both atlases (red), losses (black) and gains (green) have been recorded. Losses were incurred throughout Shropshire but particularly in mid-Shropshire around Westbury in the west and also in scattered areas across the south. Losses in north Shropshire were relatively lower. In contrast, new breeding pairs have been notably established in the north-east around the River Roden and Tern where no Barn Owls were recorded in the 1993 Atlas and where SBOG has been active in installing nestboxes. This suggests that without an intensive nestbox scheme the decline in the Barn Owl breeding population might have been significantly greater.

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.

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: Shropshire County Council, The Environment Agency. 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 and to supporters who very kindly gave donations – we are truly grateful for your support and hope that you can see within this report some of the direct results of that support.

A big thank you to Tony Boys who built three barn owl nestboxes and kindly donated them to SBOG. Tony is shown here with the products of his hard work, tree nestboxes which SBOG will install in areas of good barn owl habitat, thereby establishing another one or possibly two new pairs of breeding barn owl in Shropshire.

Several 'silent' helpers have provided invaluable support during the year, either willingly or by default! They are Lorely and Max Francis, Alan Russon, Lesley Vandyke, Paul Shearer and Paul Holmes of AHVLA Shrewsbury. Jill Barrow kindly allowed us use of her barn owl photo on the cover. We are grateful to Kingsley Press for printing the report. Active members of SBOG in 2013 were John Lightfoot, Wendy Lightfoot, Glenn Bishton, Lauren Fennell, Annette Bishton.



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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The barn owl is on Schedule I of the Wildlife and Countryside Act 1981 under which it is an offence to take, injure or kill any wild barn owl, or take or destroy an egg or damage a nest whilst it is in use