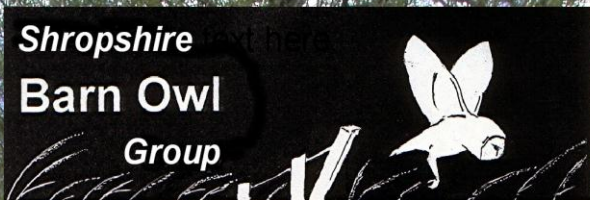


2006 Report

Shropshire
Barn Owl
Group



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Shropshire
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This report summarises the results and activities of the Shropshire Barn Owl Group (SBOG) for 2006. SBOG formed in 2002

and aims to increase the breeding population of barn owls in Shropshire by providing nestboxes in areas of suitable habitat and working with farmers and landowners to enhance their habitat. The group is a voluntary organisation which depends on raising funds and donations to accomplish its conservation work.

2006 proved to be the poorest in terms of breeding success since our records began in 2002. However, the previous breeding season had been exceptionally successful due to a peak in field vole numbers and a drop in prey availability, and hence breeding activity, was expected in 2006. Despite the lack of breeding activity, we occasionally found pairs roosting together, which suggested that they had postponed breeding for the year but hopefully would remain to attempt breeding in 2007.

What we do

- Conduct site surveys and promote the conservation of barn owl habitat with farmers, landowners, statutory authorities, conservation organisations and other interested individuals.
- Operate a nestbox scheme for barn owls in Shropshire to replenish natural nest sites in trees and buildings 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 English Nature.
- Maintain a database of breeding sites, nestbox occupation and breeding success.
- Provide advice and practical assistance to local authorities, developers and home owners where planning applications affect barn owl nest sites.
- Observe barn owls throughout Shropshire and research aspects of their behaviour in order to better understand their habitat requirements.
- Share our findings and knowledge of barn owls through reports, general articles, illustrated talks, guided walks and events.

Some of SBOG's achievements so far

- 141 site surveys completed and advice given to farmers and other landowners
- 212 nestboxes installed across Shropshire
- 33 successful breeding attempts in nestboxes
- 106 young produced in nestboxes
- 108 chicks produced in natural nest sites monitored by SBOG
- 181 breeding pairs maintained on our database
- 6 planning applications involving barn owls reviewed

Photos: John Lightfoot (p.4), John Harding (p.9), Mike Wootton (p.12), Glenn Bishton(others).

Why Barn Owls Need Our Help



In 1932 there were 287 breeding pairs of barn owl in Shropshire. In 2002 the Shropshire Barn Owl Group estimated the population at 121 to 140 pairs: - a loss of around 150 pairs. The national population has declined from 12000 pairs to 4000 pairs and the barn owl is amber-listed (medium conservation concern) in the UK. The barn owl is on the UK Biodiversity Steering Group Conservation Concern List and a target species in the Shropshire Biodiversity Action Plan. The steep decline has been attributed to a number of factors but mainly:

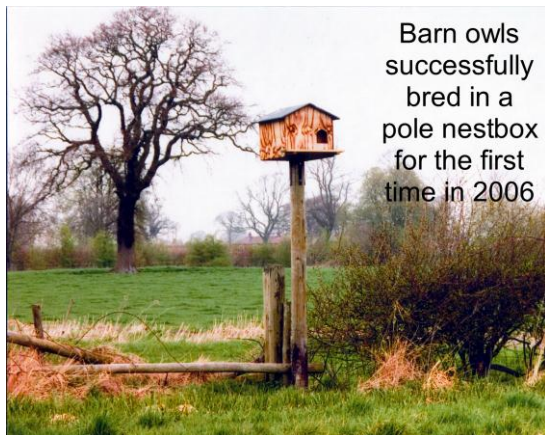
- The loss of prey-rich foraging habitat on farmland
- A reduction in the availability of nest sites in old trees and barns
- Urbanisation, pesticides and road casualties

How you can help

- Contact us if you see barn owls on your land and you have the right habitat and 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 on which they depend.
- Contact us to arrange a site survey if you have created grassy areas under DEFRA's Entry Level Stewardship or Higher Level Stewardship scheme.
- Send us records of barn owl sightings, especially during the breeding season February to August. Remember, barn owls are light brown above with white underparts, inhabit open grassland and give a loud 'screech'.
- Let us know of breeding sites so that we can update our site records.
- Report locations of dead barn owls to SBOG and send dead birds to Centre for Ecology and Hydrology for pesticide residue analysis. Website www.ceh.ac.uk
- Tree nestboxes are our biggest expense. Could you donate boards of external plywood or perhaps help us by raising funds?
- Several supporters have sponsored a nestbox, which we install in their name and keep informed of developments each year.

The 2006 breeding season

The nestbox scheme



Of 176 internal and external barn owl nestboxes available at the start of the breeding season, 3 supported breeding pairs and 44 were occupied by roosting birds at some point in the year. Table 1 includes both successful and unsuccessful breeding attempts by barn owl pairs. Of particular note was the fact that a pole nestbox was used for breeding purposes for the first time, successfully producing three chicks. The occupancy rate of nestboxes by barn owls in 2006 was 29.37%.

Other nestboxes held stock dove, jackdaw and squirrel. SBOG had 212 nestboxes in place at the end of 2006.

Table 1. Occupation of nestboxes by Barn Owls

2006

Shropshire Barn Owl Group

Nestbox type	No. nestboxes monitored	No. nestboxes occupied		Total occupied	% occupied
		Breeding	Roosting		
Tree	85	2	22	24	28.23
Building	63	0	20	20	31.74
Pole	12	1	2	3	25.00
Total	160	3	44	47	29.37

Breeding success in nestboxes and natural sites

SBOG confirmed breeding barn owls at five sites. Of the sites, three related to breeding pairs in SBOG's nestboxes at Doley, Lyneal and Spoonley. Breeding in natural sites monitored by SBOG occurred at Crudginton and Adderley.

Table 2 summarises the breeding success of barn owls in 2006 in both nestboxes and natural sites in Shropshire. The data is confined to successful breeding attempts, that is, pairs producing chicks. In view of the difficulty in directly recording the fledging of young barn owls, breeding success of barn owl pairs is measured as chick productivity. 3 chicks were produced in the nestboxes. Two natural tree cavity nest sites monitored by SBOG in 2006 produced an additional 4 chicks. The pair at Doley produced eggs which subsequently failed to hatch whilst two of the three eggs produced by the pair at Spoonley produced chicks but on a subsequent inspection four weeks later no eggs or chicks were present. The total number of chicks produced in all sites monitored by SBOG was 7 and brood sizes ranged from 2 to 3 young, mean 2.33 per pair.

Table 2. Number of barn owl chicks produced in nestboxes and natural nest sites

2006

Shropshire Barn Owl Group

Nest site	No. nests	No. chicks	Mean No. chicks
Tree nestbox	0	0	0
Building nestbox	0	0	0
Pole nestbox	1	3	3.00
Tree cavity natural	2	4	2.00
Building natural	0	0	0
Total	3	7	2.33

Pairs were well established at nest sites by the end of March. 5 chicks were ringed by BTO ringers.

SBOG conducted 39 site surveys in 2006 as part of its ongoing programme of identifying suitable sites for barn owl nestboxes and providing advice to farmers and landowners on habitat creation and management.



Comment on the 2006 breeding season

Clearly, 2006 was a poor breeding season for barn owls in Shropshire, the worst since our records began in 2002. Despite the low level of breeding activity the nestbox occupancy rate of 29.37% was only a little below the average occupancy rate for the previous four years of 33.25%, suggesting that barn owls were still present in relatively normal numbers.

Barn owl populations are known to fluctuate in response to field vole numbers which tend to peak every three years and then decline. Comparing 2006 with the previous poor breeding season of 2003 when 12 sites produced 28 chicks, only 7 chicks were produced in just three sites in 2006. This suggests that the 2006 breeding season was particularly poor and factors other than a cyclical dip in the field vole population may have been involved.

Below average temperatures in March and wet weather in early spring probably inhibited the growth of fresh grass and further depleted the field vole population across the UK. The Barn Owl Trust noted higher than normal rates of barn owl mortality and SBOG recorded four barn owl road casualties in April for the first time, suggesting hunger may have driven some barn owls further afield to marginal habitats in search of food. However, the relatively normal rate of nestbox occupancy is at odds with any evidence of abnormal rates of mortality.

Above average rainfall in May probably made it difficult for barn owls to hunt and two of the nests monitored by SBOG produced clutches which subsequently failed to hatch, suggesting pairs may have abandoned breeding activity due to a lack of prey and the consequent failure to sustain breeding condition. At one site, an unusual predominance of stashed young rats further pointed to a paucity in the availability of the barn owls primary prey, field voles. The possibility that pairs remained alive but not breeding is supported by direct observations made by SBOG. In the two instances of failed clutches, both members of the pair were recorded roosting in the nest site or adjacent cavities on a subsequent site visit. Many barn owls do not occupy their breeding sites all year round, but leave them in the autumn and return early in spring only if they are in sufficient breeding condition. Otherwise, the tendency is for them to roost elsewhere nearby and to return the following year to breed successfully

Press reports that barn owls in Britain had experienced a severe decline from an estimated 4000 breeding pairs to 1000 as a result of high mortality and a poor breeding season in 2006 were therefore probably unfounded. Indeed, barn owls in Nottingham and Dorset had a good breeding season which indicates that barn owl populations in different parts of Britain peak and fall in different years. If this is the case, and providing that the 2006/07 winter is not too severe and does not cause excessive mortality, 2007 should show signs of increased breeding activity.



A summary of Barn Owl breeding results 2002-2006

Nestbox occupation

Table 3 summarises the occupation of nestboxes by barn owls for the five years 2002 to 2006. The average yearly occupancy rate is 32% and is greater for tree nestboxes – 33% - than building nestboxes, 30%. The occupancy rate of 37% for pole nestboxes should be treated with caution due to the small sample size but might indicate the effectiveness of positioning nestboxes on poles directly within good barn owl hunting habitat and where the absence of suitable isolated trees might be restricting nesting attempts. 61% of nestboxes have been occupied by breeding or roosting barn owls at some point since they were installed.

**Table 3. Nestbox occupation by Barn Owls
2002-2006
Shropshire Barn Owl Group**

B= Breeding R=Roosting

Year	Total No. nestboxes monitored	Tree				Building				Pole				% of nestboxes occupied by breeding pairs	% of all nestbox types occupied B and R birds
		No. boxes	B	R	%	No. boxes	B	R	%	No. boxes	B	R	%		
2002	13	6	1	0	16	7	0	3	42	0	0	0	0	7	30
2003	48	22	1	6	31	26	2	4	23	0	0	0	0	6	27
2004	97	51	4	14	27	41	4	5	21	5	0	4	80	8	31
2005	135	76	13	18	40	48	9	10	39	11	0	3	27	16	39
2006	160	85	2	22	28	63	0	20	31	12	1	2	25	1	29
Total	453	240	21	60	33	185	15	42	30	28	1	9	35	8	32

Breeding success in nestbox and natural sites

Table 4 summarises breeding success for nestboxes and natural nest sites monitored by SBOG for the five years 2002 to 2006. Only those nest sites successfully producing chicks are included for analysis. 106 chicks have been produced in SBOG nestboxes and 108 in natural sites. Nestboxes have produced an average of 3.21 chicks per nest site with productivity marginally highest in tree nestboxes. Natural nest sites have produced an average of 2.91 chicks. Productivity is highest in natural building nest sites at 3.25 chicks but the sample is small and the data should presently be treated with caution.

**Table 4. Number of chicks produced according to type of nest site
2002-2006
Shropshire Barn Owl Group**

Figures in parentheses refer to number of broods

Year	Tree nestbox		Building nestbox		Pole nestbox		Tree cavity natural		Building natural		Total No. chicks	Mean No. chicks
	No. chicks	Mean	No. chicks	Mean	No. chicks	Mean	No. Chicks	Mean	No. chicks	Mean		
2002	4 (1)	4.0	0 (0)	0	0	0	20 (6)	3.3	0 (0)	0	24 (7)	3.4
2003	2 (1)	2.0	6 (2)	3.0	0	0	18 (8)	2.2	2 (1)	2.0	28 (12)	2.3
2004	12 (4)	3.0	12 (4)	3.0	0	0	14 (5)	2.8	5 (1)	5.0	43 (14)	3.0
2005	40 (12)	3.3	27 (8)	3.3	0	0	39 (12)	3.2	6 (2)	3.0	112 (34)	3.2
2006	0	0	0	0	3 (1)	3	4 (2)	2.0	0	0	7 (3)	2.3
Total broods	18		14		1		33		4		70	
Total chicks	58		45		3		95		13		214	
Mean No. chicks	3.22		3.21		3		2.87		3.25		3.05	

The mean number of chicks produced per pair in Shropshire for the five years 2002-2006 is 3.05. A long-term average productivity of about 3.2 young per pair is required to maintain viable populations. Although, as indicated above, the figure for Shropshire relates to chicks produced and not necessarily young successfully fledged it is feasible that the average production of 3.05 chicks per pair might only be just enough to maintain the population in Shropshire. SBOG's policy of targeting nestboxes at farms enrolled in agri-environment schemes with extensive areas of grassy margins and siting

networks of new nestboxes near to existing pairs to allow for occupation by dispersing young is intended to assist the creation of viable populations of barn owl.

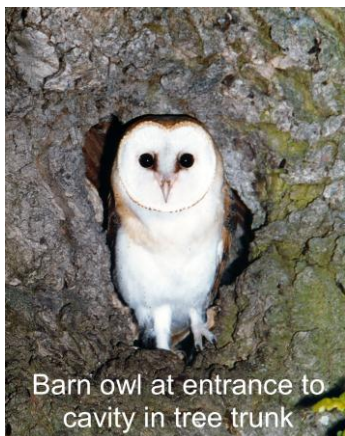
It's a sobering thought that according to Colin Shawyer three quarters of Britain's barn owl population now use nestboxes for breeding. He warns that the barn owl will face extinction if we fail to maintain, replace and supplement these nestboxes.

Tree cavity nest sites

Three tree species are utilised as breeding sites by barn owls in Shropshire – ash, oak and sycamore. Table 5. Ash is used most frequently at 68%, oak 25% and sycamore infrequently at 7% (n=28 trees). 74% of nest sites comprise a cavity in the tree trunk and 26% are in a branch. 96% of nest sites are in live trees. The average height of the nest hole above ground for all natural tree sites is 4.7 metres, range 3 to 10 metres. The actual nest platform inside the cavity can be some depth below the entrance and in one instance where the nest hole was 10 metres above ground level the nest platform within the tree trunk was actually at ground level.

**Table 5. Natural tree nest sites
2002-2006
Shropshire Barn Owl Group**

Tree species	% (No.)	Mean height (m)	Trunk % (No.)	Branch % (No.)	Live tree % (No.)	Dead tree % (No.)
Ash	68 (19)	5.0	84 (16)	16 (3)	94 (18)	6 (1)
Oak	25 (7)	4.1	50 (3)	50 (3)	100 (7)	0
Sycamore	7 (2)	4.5	50 (1)	50 (1)	100 (2)	0
Total	100 (28)	4.7	74 (20)	26 (7)	96 (27)	4 (1)

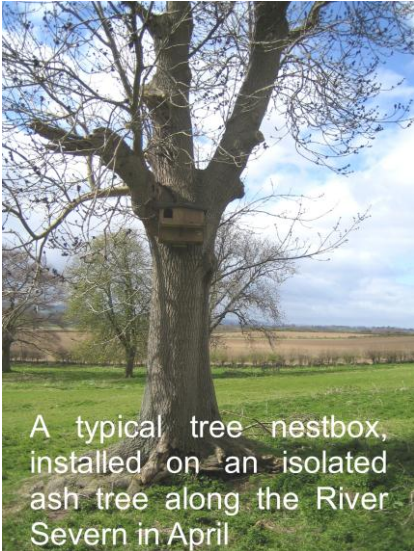


Barn owl at entrance to cavity in tree trunk

Trees utilised for breeding were situated in hedgerows in fields, hedgerows adjacent to roads or in isolated trees within fields: trees at the edge of woodlands were ignored. It is unlikely that barn owls have a preference for any particular tree species but that they adopt those trees that are predominant in the landscape and have a propensity to form holes that are large enough to support a brood of barn owls. It is most probable that any large, mature tree that formed cavities of the required dimension would be utilised.

Current nestbox projects

As well as responding to requests from farmers and landowners from across Shropshire to survey their sites and provide assistance in encouraging barn owls to breed, SBOG has a number of defined projects where we aim to provide a series of interconnected nestboxes in areas of good barn owl habitat to create viable breeding populations. We use modified tea chests for internal sites in buildings and rectangular or 'A' shaped nestboxes for external sites on isolated trees or on the top of poles where there are no suitable trees to support the nestbox. Tree boxes and pole boxes are positioned at a height of around 3 metres and facing east to reduce the impact of strong westerly winds and rain.



A typical tree nestbox, installed on an isolated ash tree along the River Severn in April

We tend to install just one box on a good isolated tree bang in the middle of ideal barn owl grassland habitat, being prepared to install a second nestbox if necessary. The ideal combination, where feasible, which covers all eventualities is to install both a tree nestbox and a T chest in a farm building. The cost of around £50 per box tends to focus the mind a little and ensure that we are as sure as we can be that barn owls will be interested! Fortunately, many landowners offer to cover the cost of the nestboxes, and as a voluntary group dependant on raised funds, this is most welcome and allows us to be proactive in targeting other sites across the county.

In 2006 SBOG helped Leo Smith survey sites and construct eleven nestboxes for the Clun Forest and Upper Onny area in southwest Shropshire. Alan Reid of the Forestry Commission is also engaged in a project to install nestboxes on the perimeter of Forestry Commission plantations and adjacent farmland in the south of the county and SBOG was able to provide assistance and to supply the nestboxes. These projects will provide much needed breeding sites for barn owls in a part of the county where their current distribution is limited.

We envisage that new nestboxes installed in sites where barn owls have not been recorded in recent years or where the habitat has only recently been improved may take several years before they are occupied by breeding pairs. The nestbox scheme is therefore viewed as a long-term project and we look forward to new pairs being established in nestboxes over time with the careful targeting of suitable sites.

The Weald Moors Project

The Weald Moors comprises an area of mixed farmland covering 50 square kilometres immediately north of Telford. Historically marshland, much of the land has been continuously drained by drainage ditches since at least 1576, and possibly more intensively from the 1800's. The water table remains near the surface and barn owls are able to hunt along the grassy ditch banks and patches of marsh. Several farms are

enrolled in agri-environment schemes with low density grazing and grassy headlands providing extensive areas of good barn owl habitat.

One additional nestbox was installed on The Weald Moors in 2006 on an existing site bringing the total number of nestboxes in the area to 30 on eleven sites. Breeding did not occur in any nestbox on The Weald Moors for the first time since boxes were installed in 2002 and the total number of chicks produced in SBOG nestboxes remains at 39. However, we were encouraged to find two barn owls, probably a pair, utilising a nestbox for the first time since it was installed in 2005. Set in some excellent grassland habitat we await to see whether a new pair becomes established in 2007.

The River Severn and River Tern Project

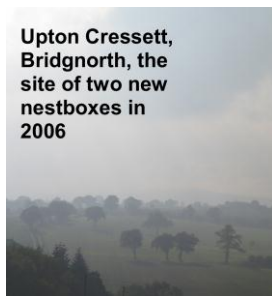


This project aims to establish additional breeding barn owls along the River Severn and River Tern southeast of Shrewsbury. 29 nestboxes have been installed in the River Severn and Tern corridor since 2002.

Nine nestboxes on five new sites were added to the River Severn and Tern Project in 2006. The total number of sites in the project is now 12. Barn owls did not breed in any of the nestboxes but extensive work by

Mary Thornton and her team from Eon Power of Ironbridge Power Station saw three pole boxes installed at a site to augment and possibly eventually replace three existing tree nestboxes which have regularly been tampered with. The pole boxes are substantial structures, one of which, installed only in March, contained barn owl pellets and feathers when monitored in August. This suggests that, providing intruders on the site can be deterred from interfering with the boxes, breeding is a distinct possibility. This would be a tremendous achievement as barn owls have not been recorded breeding in the vicinity for many years.

The Bridgnorth Project



Analysis of both SBOG and Shropshire Ornithological Society barn owl records in 2002 suggested that there were probably only 7 pairs in the Bridgnorth area with breeding confirmed at only one of the sites. SBOG was therefore eager to commence a project in Bridgnorth in order to obtain a better understanding of the barn owl population there and to enhance their numbers.

Two nestboxes were added to the Bridgnorth Project on two farms. The Bridgnorth Project now comprises 13 nestboxes on 8 sites.



The new sites were at Upton Cressett from where Mike Wooton contacted us about a pair breeding in an ash tree adjacent to his home in 2005. A site visit with Mike in April 2006 identified some good barn owl habitat in the vicinity of the existing pair, particularly grass margins around arable fields created under agri-environment schemes. Two external tree nestboxes were duly installed in October. Will these provide our first nestbox breeding pair in Bridgnorth? We are very optimistic and with Mike's enthusiasm it is a distinct possibility. SBOG is extremely grateful to him for making contact with the respective farmers and the subsequent arrangements that he made for installing the boxes.

Installing one of two nestboxes at Upton Cressett

New Barn Owl habitat research

Research just completed by Nick Askew of York University, with financial assistance from the Barn Owl Trust in Devon, focused on the habitat requirements of barn owls in the farmland landscape. Looking at lowland arable landscapes, where more than 50% of the farmed land is arable or horticultural, pastoral landscape, over 50% grassland, and mixed landscapes where neither predominate, Nick was able to show that arable landscapes provided more prey-rich habitat than pastoral or mixed landscapes, possibly because the margins in arable landscapes are of a better quality for small mammals, particularly field voles, than the grazed margins in pastoral landscapes.

Given that the barn owl is typically perceived to be associated with open grassland, the fact that arable farmland seems to provide better habitat for barn owls than pastoral land and that barn owls require a larger area of rough grassland in a pastoral landscape than an arable landscape might on first examination appear to be a little odd. However, the belief that pastoral farmland means grassland which equates to barn owls is an illusion. The barn owls main prey, field voles, require a specific structure to their grassland –damp, tussocky grass with a thick sward 20-40 cm high and a deep litter layer below. Permanent, ungrazed grassland of this nature is infrequent on pastoral farmland, where the grass is often heavily grazed to the ground and to the edge of the field. Other fields are frequently cut for hay or silage. Only small fenced-off strips such as plantations or steep wet areas usually remain to provide small patches of permanent rough grassland suitable for field voles and hence hunting barn owls.

Arable farmland on the other hand provides vole – rich habitat in the form of grassy margins along field edges and drainage ditches whilst hedgerows and woodland edge provide habitat for wood mice, the barn owls secondary prey. Whilst barn owls infrequently hunt over crops or horticultural fields, at specific times, such as the harvesting of cereals or sugar beet, a temporary but abundant supply of wood mice might occur and prove easy prey for barn owls over a few nights.

Barn Owl Road Casualties

SBOG has been collating data on barn owls found dead on roadsides since 2002. Many of the birds are found by members of the group or reported to us or The Shropshire Ornithological Society. Birds found dead on roads are likely to be the result of collisions with vehicles. The light weight and buoyant flight of barn owls hunting over grassy verges adjacent to main roads renders them vulnerable to being caught up in the slip-stream of a passing vehicle and death is usually caused by collision with the following vehicle

The table below indicates that that 'A' roads cause most casualties (93%) with relatively few birds found dead on 'B' roads. The A5 and A483 cause the most deaths and are a serious threat to barn owls. Of the 59 road victims identified 66% relate to the winter period October to March. This period correlates with the dispersal of juveniles from the natal site and an increase in the hunting range of adult barn owls of up to 5km from the nest site.

Shropshire Barn Owl Road Casualties 2002-2006															
Road	Male	Female	J	F	M	A	M	J	J	A	S	O	N	D	Total
A5 Telford-S'bury-Oswestry	2	2	1	5	1	2				2	1	1	4	2	19
A483 Pant-Oswestry	3	1		3	2				1						6
A49 Ludlow-S'bury-Whitchurch					3						3	1			7
A41 Albrighton-Whitchurch		1										2	1		3
A495 Oswestry-Whitchurch		3		1					1				2		4
A53 Market Drayton Bypass	1			1	1	1					3				6
A458 Halfway House-B'north												1	1		2
A442 Alveley-Telford-Prees				1											1
Other A roads		1		3							3		1		7
B roads						1			1	1		1			4
Total	6	8	1	14	7	4			3	3	10	6	9	2	59

Four road casualties were recorded in April for the first time. The inadequate availability of field voles and weather detrimental to hunting in early spring may have prompted some barns owls to hunt further afield from their usual feeding ranges than they would normally do at this time of year, resulting in an increased movement of birds and ultimately collision with a vehicle.

Comparing those casualties for which it was possible to sex, more females (8) have been recorded than males (6), though the difference is not significant. One male found dead at Montford Bridge in February weighed 330 g, within the normal weight range for male barn owls of 330g. A female on the A5 at Sandford weighed 320g in August and another on the A449 at Church Stretton in October weighed 290g,

considerably below the normal weight for females of 370g. Death can be attributed to starvation when male and female body weights fall below 240g and 250g respectively.



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. In addition, the Countryside and Rights of way Act 2000 deems reckless disturbance of a barn owl at or near the nest an offence. Disturbance may be deemed reckless if it is committed by someone who could be expected to know that the birds might be present but failed to check. Under the act it is illegal to release barn owls into the wild in Britain without a license.

With a little care and imagination the presence of breeding barn owls in a building under development does not have to be a problem and both birds and owners can be accommodated. In recent years we have helped construct barn owl lofts in the roof space of developed buildings, provided nestboxes adjacent to developed buildings supporting barn owls and given advice on habitats around proposed developments. Bit by bit this helps mitigate the effects of any developments and ensures that barn owls are not necessarily forced to move out.

One problem becoming increasingly evident from our site surveys is that many old disused farm buildings are in a state of disrepair. Some of them already support barn owls and without attention will become unviable. Not only is this likely to impact on the barn owl population but many of the buildings are undoubtedly of historical and aesthetic interest and as an intrinsic part of the farmland landscape should be preserved.

Illustrated talks and events

John Lightfoot and Wendy Arrowsmith gave four illustrated talks in 2006 and made one school visit. Glenn Bishton led a guided bird walk in the Severn Gorge in May with Alec Connah of the South Telford Rights Of Way Project as part of the week-long walking festival and another in December for Mark Pritchard MP and his party. We also led the South Staffs Naturalists Society around Harper Adams University College Farm in July. SBOG helped with a stall making nestboxes for small birds at a countryside activity event organised by Madeley Parish Council at Madeley Park, Telford in October. The proceeds from these events were added to the SBOG's funds. John Lightfoot completed a number of volunteer weeks at the Barn Owl Trust headquarters in Ashburton, Devon. Active members of SBOG in 2006 were John Lightfoot, Wendy Arrowsmith, Glenn Bishton, Jonathan Lightfoot and Mike Wootton.

SBOG was contacted by the BBC in the summer and asked to locate a barn owl that would be suitable for filming as part of Alan Tichmarsh's wildlife series to be shown sometime in the autumn of 2007. With a dearth of barn owl activity in 2006 this request was not as easy as it might normally have been, but a wonderful summers evening on the Weald Moors filming spotted flycatchers and farmland birds at Wall Farm was rounded off on John Brown's land near Crudgington at dusk with shots of a barn owl peering out of its nest cavity in a ash tree before leaving to hunt in the fading light.

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 gratitude and thanks to the following for their support: The Barn Owl Trust, Shropshire Ornithological Society, Shropshire Wildlife Trust, WildAid, Allscott Sugar Factory, Ironbridge Power Station (Eon Power), Harper Adams University College, Severn Trent, The Forestry Commission, The Environment Agency, South Telford Rights Of Way Partnership and Madeley Parish Council. A special thank you to the Trustees of the William Dean Trust.

There are several 'silent' helpers whose names do not appear in the literature for one reason or another but who have provided invaluable support on various projects during the year, either willingly or by default! They are Bill Hodgkiss, Neil Jones, John Turner, Leo Smith, Alan Lees and Alan Russon. Margot Manuel, Delaine Haynes and Margaret Harper have generously sponsored nestboxes.

We are also grateful to the many people who keep us informed of barn owl nest sites and sightings. These records enable us to maintain an accurate database of breeding barn owls and sites in Shropshire and also ensure that the nest sites remain viable. For example, we can monitor decaying trees and intervene by substituting a nestbox where appropriate.

We are indebted to the many farmers and landowners across Shropshire who are concerned for their barn owls and who have contacted us for our assistance or have responded with good grace to our requests to install nestboxes on their land. This report is intended to go some way in keeping them informed about the conservation of the barn owl in Shropshire and to thank them for their support and co-operation. For site confidentiality reasons we do not propose to name them here but we hope that they all know how much we appreciate their help and can assure them that as a result of their commitment the prospects for the barn owl in Shropshire are a little more positive.

What farmers and other landowners can do

- On arable farmland, retain existing grass margins, preferably 6 metres in width, or sow new ones along field headlands, hedgerows, riverbanks, ditches and field corners.
- On grazing land consider pulling a temporary fence line back a few metres from a hedge or ditch to allow the grass to develop naturally.
- Where grass mowing is essential to prevent the development of scrub, consider topping different patches in rotation over several years and set the mower to its maximum height.
- Retain posts as hunting perches.
- Retain decaying hedgerow trees with holes and cavities to provide nest sites.
- Provide nestboxes. The Shropshire Barn Owl Group will construct, install and monitor nestboxes for a nominal cost of £50.
- Retain old barns and stock shelters, or where they are to be developed, consider incorporating a loft space for breeding barn owls.
- Where rodent control is unavoidable use less toxic first generation rodenticides such as warfarin rather than the more toxic second generation brodifacoum
- Contact DEFRA www.defra.gov.uk to obtain options for creating barn owl habitat under the Entry Level or Higher Level Stewardship schemes.

What Barn Owl's Need

GOOD BARN OWL HABITAT
Permanent, ungrazed tussocky grassland



POOR BARN OWL HABITAT
Intensively grazed, unsuitable for field voles and barn owls



Research has shown that a breeding pair of barn owl range over around three square kilometres, depending upon the habitat, and that they hunt mainly within 1 kilometre of their nest site in summer but will feed or roost up to 5 kilometres away in winter. Within their range a breeding pair require a minimum of 4 hectares (10 acres) of damp, tussocky grassland which is permanent and ungrazed or 8 kilometres of 3 to 5 metre wide grassy margins. The structure of the grass is important and should comprise a thick sward 20-40 cm high and remain largely unmanaged to allow a dense thatch of fallen stems and leaves to develop at the base of the tussocks. This will 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, meadow foxtail, meadow fescue and wood false-brome. A Mix that incorporates some softer, less fibrous grasses to provide nutritious food for field voles is preferable and could include Yorkshire fog, smooth meadow grass, rough meadow grass, small cat's-tail, sweet vernal grass or velvet bent.

Grassed linear edge features on farmland such as hedgerows, margins, drainage ditches, fence lines, bank slopes and woodland edge provide habitat for field vole and other small mammal prey such as wood mice and common shrew and are therefore important foraging areas. Grassy margins sowed around arable fields under the agri-environment schemes are an increasing and valuable hunting habitat for barn owls. In urban areas, road verges, railway embankments, development land and other unmanaged grass fields provide suitable foraging habitat. Intensively grazed land, hay meadows, silage fields and rough grazing with patches of scrub and bracken are poor or transient habitats and offer few opportunities for field voles to establish.

Barn owls need several cavities in large old trees or outbuildings within their home range for both nesting and roosting. Barn owls are susceptible to wet and inclement weather and nestboxes provide relatively secure, dry and warm breeding and roost sites for barn owls which probably enhances their survival.

