## **Mid-Cheshire Barn Owl Conservation Group**

[incorporating North, North East, East and South Cheshire]

## Newsletter

Issue No 48 - May 2017



Committee:

John Mycock [Chairman and

Treasurer]

David Kerr [Membership Sec]

Peter Galley Rod Atkinson Roy Leigh Ian Jones Tony Dickinson David Bromont Nigel Wilde Darren Mayer Matt Lawton

#### Chairman's Chat

Although we're already into May, this is the start of an exiting year for our Group.

There is the usual work involved in monitoring our barn owl boxes, checking, ringing and recording both young and adult birds, repairing and re-erecting boxes after the high winds earlier in the year, and generally carrying out our conservation work as usual.

However, this year for the first time we are co-hosting a 'Barn Owl Conference' in October. The initiative was tabled by Roy Leigh as an event we would run ourselves, inviting other local barn owl groups to take part in, and to listen and learn from each other.

As part of that initial idea, Roy contacted Colin Shawyer to ask him if he would be willing to give the opening key note speech. Not only was he willing to do that, but he suggested running the event in partnership with the national BOCN [the Barn Owl Conservation Network] which Colin had founded. This was an opportunity not to be missed – a great opportunity to bring together like-minded people from around the country to 'contribute, listen and learn' on a national basis – and, of course, a bit of kudos and recognition for our Group.

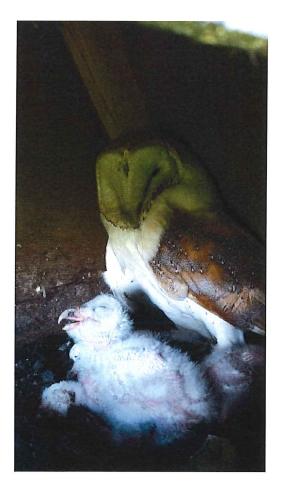
A 'flyer' sheet is attached to this Newsletter if you would like to come along, take part in, or just listen and learn what we and other groups get up to.

Roy Leigh and Matt Lawton have also been busy compiling leaflets for distribution to farmers and landowners regarding land management for barn owl conservation and

the dangers of using rodenticides in vermin control. Copies of these leaflets can be supplied upon request [too large for inclusion with this Newsletter].

Included in this issue of the Newsletter is a report on our recent AGM, extracts from the Cheshire Barn Owl Report for 2016, an article titled "Eggs, Chicks and Things", and a short commentary from Colin Shawyer on his expectations for 2017. To avoid an over-loaded Newsletter there is also an attached request for help from Colin regarding barn owl conservation.

As for 2017 so far – well dare I say things look quite optimistic at the moment. Breeding pairs are being found in most of last year's locations, with clutch/brood sizes larger than last year. Fingers crossed that food availability does not decline and that the weather does not deteriorate.



Picture taken in mid-May

But we are finding other birds successfully using our boxes – like the kestrels below.



Finally, based on an earlier finding this year, I had hoped to report that one of our birds had become the oldest barn owl in the 'wild' – the bird was re-trapped in Shropshire, having been ringed in our area as a chick some 11 years previously.

But no sooner had we found out about this bird when we saw an article from 'down south' where a female barn owl had been recorded in Buckinghamshire. She had been ringed as a chick in 2001, and was found incubating four eggs in June 2016 – becoming the oldest barn owl recorded in Britain ay 15 years and 113 days.

I will conclude with my usual appeal – if you are fortunate enough to see any signs of [or hear] barn owls please can you let us know [email <a href="mailto:cheshirebarnowls@gmail.com">cheshirebarnowls@gmail.com</a> or our website <a href="mailto:www.cheshirebarnowls.co.uk">www.cheshirebarnowls.co.uk</a> or phone 01606-75937 or 07970-235473].

John Mycock			
[Chairman]			

## **AGM**

We held our sixteenth AGM on the 26 April 2017, at Lower Moss Wood [thanks again to Ray Jackson for the use of his facilities, greatly appreciated].

The event was well attended by 18 group members who, after the formalities of the event, took part in an interesting question and answer session followed by a cordial chat over cheese, wine and drinks.

Congratulations and thanks to Nigel Wilde on joining our committee, and many thanks to all members who attended [or offered their apologies if unable to attend].

## **Extracts from the 2016 Cheshire Barn Owl Report.**

#### Introduction

This report collates data from the Wirral Barn Owl Trust, Wirral South and the Mid, South, West, North, East and North East Cheshire Barn Owl grou

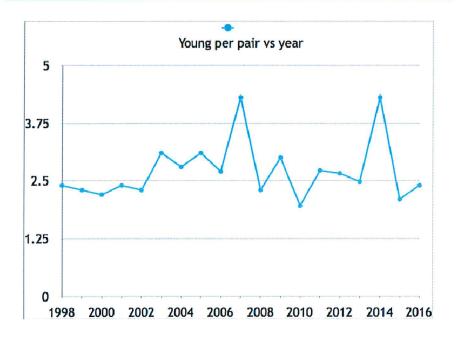
## **Summary**

The number of breeding pairs was around the average but the productivity remained below the average and was below the figure quoted by Shawyer for sustainability.

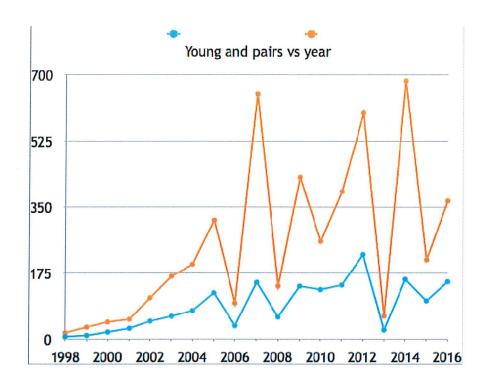
153
367
2.4
1770

Note that in the vast majority of breeding sites the young were ringed OR were close to fledging.

Group	Successful Sites	Counted Young +	Young per Breeding pair
Mid	25	55	2.2
North	2	4	2
N/E	16	30	1.9
South	29	74	2.6
WBOT	17	34	2.0
WS	10	21	2.1
West	44	120	2.7
East	10	29	2.9
Total	153	367	2.4



Group	Tree box	Barn box	Pole box	Building	Natural Tree site	Total
Mid	24	0	0	1	0	25
North	2	0	0	0	0	2
East	10	0	0	0	0	10
N/E	11	0	0	2	3	16
South	24	0	3	2	0	29
WBO T	8	0	8	1	0	17
Wirral	7	0	2	1	0	10
West	6	0	38	0	0	44
Total	92	0	51	7	3	153



#### **Discussion**

The Cheshire barn owl population seems to sustained at around 150 pairs with productivity determined by weather in early spring which determines the vole population. It appears that the years of high productivity are not translated into a subsequent increase in the population which is probably limited by the food supply.

The most interesting data is that which shows yet again that 45% of the adults trapped at the nest site are un-ringed (10 unringed,13 ringed) which shows that there is still large population out there which we are not detecting. So the real population in Cheshire could be around 300 pairs. The percentage of un-ringed adults has remained pretty constant over the years which indicates that this population remains healthy.

This data on un-ringed adults comes from the West Cheshire group. The author requests that in future the other groups provide this data, if possible. You may have it already, but if not it can be obtained by blocking the box entrance with a blocker on a pole which is then held in place with a bungee cord. The adults can then be retrieved with the young.

## **Acknowledgements**

The author wishes to acknowledge the assistance of A McCreary and B Wright of the West Cheshire Group, S Binney of the MRG, S Harris of the Wirral Barn Owl Trust and J Mycock of the mid Cheshire group who have provided the data for this report

J D Wild January 2017

## **Eggs and Chicks and Things?**

Having opened up this series of articles in the last Newsletter on how to age and determine the sex of barn owls, its perhaps time I should go back a bit and look at barn owls and their eggs and chicks and 'things'.

#### Courtship and Things

Before the consummation of any partnership, human or otherwise, there is usually a bit of a courtship. So it is with barn owls.

The first signs of breeding activity can be detected as much as 6-8 weeks before the laying of the first egg. The owls' activity is centred increasingly around the nest site. Usually the first sign of increased activity involves the male spending more time at the nest site at night with a gradually increasing tendency to call using its long drawn out screech – presumably to advertise ownership of the site to other males and/or to attract a mate.

As time passes, the males spend more and more time around the nest with its mate. This reaches a peak around 2 weeks before laying – again, presumably, to prevent other males from fertilising the female. However, within a few days after the female has finished laying, the male will move out, returning to its more usual roost sites.

Before laying, there is a great deal of ritual to go through. Male and female chasing each other, flying in and around the nest site at high speed and swerving, twisting and diving. They have an extensive vocal repertoire which they use to great effect. There are also special calls used by males and females during copulation. There is a great deal of contact during the courtship. Bill fencing, mutual preening and 'cheek-rubbing', usually accompanied by tongue clicking, various squeaks, twittering and a snoring hiss.

Food presentation is an important part of the courtship. For about 10 days or so before laying the female remains at the nest and the male provides all her food. This possibly explains why, when there is a food shortage, the pair produce less eggs than would normally be the case [less mating taking place].

#### **Eggs**

The barn owls' eggs are oval and when newly laid are beautifully white – see picture below taken in mid May 2017.



They are around 40mm x 32mm in size and around 20-24gms in weight.

The number of eggs laid usually correlates closely to the availability of prey [and of course the effects of weather]. When the main prey of voles and shrews is on a 'high', clutch sizes can be in excess of 8, but in 'low' seasons clutch sizes may be down to just 1 or 2 eggs.

The eggs are usually laid at 2 to 3 day intervals, although longer gaps may be encountered. A few days before laying the female loses her feather in the belly region and develops a brood patch, an area of bare skin which becomes richly supplied with blood vessels, creating a warm area to help incubate the eggs.

Incubation starts immediately after laying the first egg, which results in the eggs hatching at the same 2 to 3 days interval as the laying gaps. The picture below, again taken in May 2017, shows the differences in sizes of the 3 chicks.



The incubation period itself takes on average around 30 days, give or take a day, with the chicks themselves effectively being fully grown at around 70-75 days old

The above gives a very general and basic introduction to eggs and chicks and things – which will be extended in future issues of the Newsletter.

## A summing up of the season last year and predictions for 2017 – by Colin Shawyer

Last year in my summing up of the barn owl season my prediction for 2017 was:

"I think there will be a slow start to the breeding season especially for those pairs which double-brooded in eastern England this year. I would, however, expect the high vole abundance seen in 2016 to be maintained during the early half of next year. This should be reflected by high levels of occupancy at traditional barn owl nest sites, a late-April laying date for most pairs and slightly higher than average brood sizes in most regions. And should second broods occur anywhere in 2017 I would expect these to be confined to central and western regions of Britain."

#### Early visits in 2017

Having undertaken a few early nest visits in mid-April I believe that this prediction will turn out to be largely correct.

#### Nest occupancy, laying dates and brood sizes

Occupancy indeed seems high in many regions of Britain. At most sites female body weights in early/mid-April were above the 365g threshold for breeding but these weights together with early developing brood patches, indicated that egg-laying was not imminent but would commence about 2-3 weeks later. This was borne out by more recent nest visits in eastern England, with average laying dates for those pairs which did not double brood last year, being the last few days of April into early May. I suspect this will not be dissimilar for those birds in midland counties too. But in the south, south-west and west, first egg dates appear, on the whole, to be about three to four weeks earlier, during late March and the first week of April with clutch sizes and eventual brood sizes, weather permitting, higher than average.

These early dates also suggest that, unlike last year when in eastern regions we had some early breeding and hence a good number of double-brooding events, the majority of double-brooding is likely to occur this year in the south and western counties of England and in parts of Wales and possibly Scotland too.

I hope that this information will be useful to my BOCN and BTO colleagues and allow us to help optimise the timing of our barn owl nest visits this year.

Best wishes for what should be a good breeding season in 2017 and one which for first broods at least, should be far better than last year in the south-west but not too dissimilar to last year in the east but with fewer second broods.

Keep in touch and should you observe any unusual physiological characteristics in barn owls at the sites that you visit please email me photographs of these at colinshawyer@aol.com. Last year BOCN Advisors provided four photographs of barn owls or eggs with unusual characteristics.

#### Colin Shawyer

Barn Ow	l Conservation	n Network Fo	ounder and	Co-ordinator	– UK and	Ireland
17th May	y 2017					

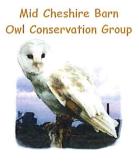
## **And Finally**

If anyone has any comments or queries on the above matters or anything they would like to contribute to future Newsletters [articles, letters, comments, concerns, questions, etc] please contact John Mycock on 07970-235473 or 01606-75937 or <a href="mailto:cheshirebarnowls@gmail.com">cheshirebarnowls@gmail.com</a> or <a href="mailto:www.cheshirebarnowls.co.uk">www.cheshirebarnowls.co.uk</a>









# In Partnership - the Mid Cheshire Barn Owl Conservation Group and The Barn Owl Conservation Network invite you to attend:

## A Regional Barn Owl Conference

On 7<sup>th</sup> October 2017 9.30am – 5pm at The Lion Salt Works, Marston, Northwich, Cheshire CW9 6ES

The programme\* will include national, regional and local speakers – Colin Shawyer will give the Keynote presentation supported by a cast of local and regional barn owl workers. Tickets £10.00 include a buffet lunch and refreshments throughout the day. Please join us for what should be a brilliant day.

To book your seat or request further information please contact <a href="mailto:roy@leighecology.co.uk">roy@leighecology.co.uk</a> or complete the booking form and send to RBOC C/O Roy Leigh, The Oaks, 8 Hall Drive, Marston, Northwich, Cheshire CW9 6DT



<sup>\*</sup>A detailed programme will be published mid-September and forwarded to all delegates via email.



#### PLEASE CAN YOU HELP?

#### The Barn Owl Conservation Network: an introduction

As most of you already know the BOCN was founded following the Barn Owl Survey of Britain and Ireland which I undertook between 1982 and 1985, the findings of which were published as a report, *The Barn Owl in the British Isles, its Past, Present and Future*. The main purpose of the BOCN project was to take forward the recommendations made in this report which were to develop a sound strategy for the future conservation, research and population monitoring of barn owls in the UK.

Through your support and dedicated actions the research and conservation goals that we set almost three decades ago have now largely been achieved. The habitat needs of barn owls and the potential effects of road mortality and rodenticides were investigated and published in the 1990's, a new national survey, *Project Barn Owl*, was subsequently undertaken and this was followed closely by the ten year *Barn Owl (nest) Monitoring Programme (BOMP)*. Most importantly, rough-grassland feeding grounds have been successfully re-established throughout much of Britain on which artificial nest sites have been installed. Through these efforts a nationwide matrix of habitat corridors has been established reconnecting the once isolated and fragile populations of this bird, farm to farm and county to county.

As a result of these initiatives and the dedicated conservation work and nest monitoring that you and others have undertaken since 1988, the breeding population in Britain can now be estimated at over 9,000 pairs. This figure at least doubles that recorded by the earlier barn owl surveys in 1985 and 1995 and for some local barn owl populations, densities as high as 5 pairs per square kilometer are currently being recorded.

Conservation success can be measured today by the fact that about three-quarters of breeding barn owls in Britain are now dependent on the nestboxes and owl towers that we, and those who have been guided by us, have installed. Recently this culminated in the barn owl climbing out of the *Species of Conservation Concern in the UK,* 'amber list' into the 'green list'. What better tribute to the dedication and hard work you have achieved since the BOCN and its conservation plan for the species began all those years ago.

#### **Rodenticides**

Concerns about the exposure of the second generation anticoagulant rodenticides (SGARs) to non-target wildlife and the environment generally which were first expressed for barn owls in the early 1980's, are now being considered once again. This is mainly because, during the last 30 years an increasing proportion of barn owls and other birds of prey submitted for *post mortem* examination have been shown to contain rodenticide residue in their tissues. Whilst there is little evidence that the levels of rodenticide found are causing any noticeable effects at the population level, indeed populations of most of these species have increased since the 1990's, there is a clear responsibility to maintain a safe environment on which barn owls and other wildlife can depend.

#### The new Rodenticide Stewardship Programme

The Health and Safety Executive (HSE) is the Government body which has regulatory authority for, amongst other things, ensuring the safe use of rodenticides and other chemicals in Britain. Directives by the European Union for member states to improve the way in which SGARs are marketed, distributed and used has recently resulted in the HSE imposing more stringent procedures for rodenticide use in the UK.

The barn owl is nominated by HSE as a sentinel species for monitoring the effectiveness of the UK rodenticide stewardship regime for reducing wildlife exposure to rodenticides. As a result the Campaign for Responsible Rodenticide Use (CRRU) was asked by Government to develop a Rodenticide Stewardship Programme and enact and monitor its effectiveness. This Programme aims to ensure the safe and more targeted use of these compounds against rats and mice whilst maintaining the essential need for protecting public health and foodstuffs.

In particular the Programme seeks to achieve future reduction in the levels of environmental contamination by SGARs which is believed to have been caused largely by the misuse, unnecessary use or poorly-targeted use of these rodenticides. This is to be achieved by helping to ensure that those who are engaged in the control of rats and mice receive informed guidance and formal training in the proper and more effective application of these chemical baits. In order to monitor the effectiveness of the Stewardship Programme, two complementary wildlife monitoring schemes, the Predatory Bird Monitoring Scheme (PBMS) and the Barn Owl Monitoring Scheme (BOMS) are being undertaken.

#### **Predatory Bird Monitoring Scheme (PBMS)**

The barn owl, because it is a specialist predator of small mammals, is a key species for investigating the potential effects of SGARs on non-target wildlife. In the early 1980's I was instrumental through my association with the then Nature Conservancy Council and Institute of Terrestrial Ecology of introducing rodenticide residue analysis into the Predatory Birds Monitoring Scheme (PBMS), now undertaken by the Centre of Ecology and Hydrology (CEH). The PBMS as a result of its long-term monitoring investigation has over the last two decades reported a steady increase in the proportion of predatory bird specimens found to contain detectable levels of SGAR residues in their livers.

Today the PBMS plays an important part in the Rodenticide Stewardship Programme and will, on an annual basis, continue to investigate rodenticide levels in those barn owls which have been found dead and sent to the Scheme by you and other members of the public. (Should you find a dead barn owl please continue to contact PBMS on 01524 595830 and request a packaging kit to enable you to post the carcass to them.)

#### Barn Owl Monitoring Scheme (BOMS)

In addition to the PBMS the BOCN was, in 2015, asked by CRRU to set up and develop a barn owl nest monitoring scheme in five key regions of England. The project known as the Barn Owl Monitoring Scheme or BOMS aims to measure and evaluate any significant changes which may occur in levels of barn owl nest occupancy and breeding performance over time. Like previous research studies the Scheme will take account of the short-term changes in these two parameters caused largely by the 3-4 year cycle of abundance in field voles, the main prey species for barn owls in mainland Britain. The annual results of BOMS are being reported to colleagues at Reading University for independent analysis.

#### How you can help

Whilst there is no evidence to suggest that rodenticides are currently affecting barn owls or their breeding population in the UK, it is more difficult to determine if any hidden sub-lethal effects are occurring as a result of these chemicals. Should this be the case any effects are most likely to be

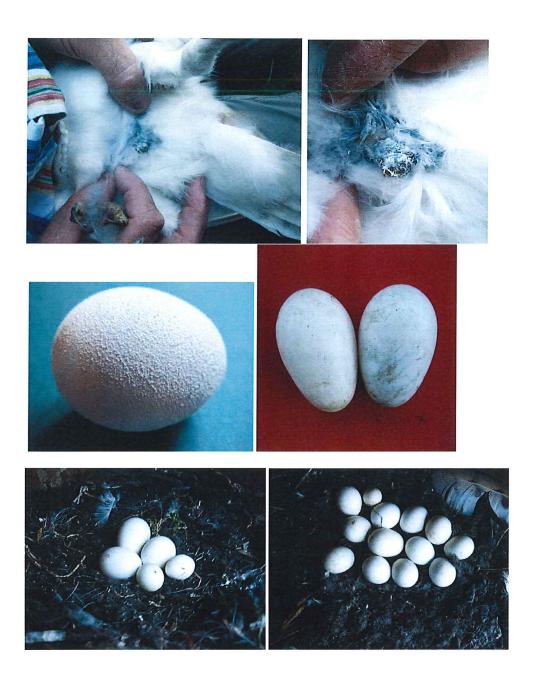
identified by unusual behavioural characteristics displayed by the owls or by uncharacteristic growth patterns and/or physiological deformities in their eggs or young.

Those of you who monitor the nests of barn owls have a unique opportunity of observing any unusual characteristics in eggs, egg shells or development of chicks and adults, particularly in wing/feather growth. In the past I have photographed barn owls blind in one eye; with a leg, foot or talon missing and with deformed wings, characterized by abnormal primary feather development. However, most of these abnormalities can be explained by past injuries rather than as deformities during development.

During the next few seasons when, like me, you will be inspecting clutches of eggs or handling and ringing adults or chicks (under your Schedule 1 Disturbance Licence), could I please ask that you note anything you consider unusual. For example, some of you already send me photographs of the outstretched wings of adult barn owls so that I can help you age these birds. But please do extend your involvement in BOMS by sending me photographs of anything you might consider unusual in the eggs or owls that you encounter on your nest monitoring rounds. Message me on 07774 899344 or email at colinshawyer@aol.com.

Below are some examples of clutches, chicks or adults that I have found when inspecting nests. As I said deformity is very rarely seen in barn owls or their eggs but <u>anything</u> you find and consider unusual will be an important contribution to the Barn Owl Monitoring Scheme (BOMS) we, the BOCN, are undertaking.





Hope all goes well during the forthcoming season and please keep in touch.

Colin

BOCN Founder and Coordinator: UK and Ireland

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