

***Strettons Area  
Community  
Wildlife  
Group  
&  
Shropshire  
Ornithological Society  
(Church Stretton Branch)***



***Bird Survey  
Results  
2017***



# CONTENTS

<b>Strettons Area Community Wildlife Group.....</b>	<b>1</b>
<b>Curlews, Lapwings and Other Birds Survey .....</b>	<b>2</b>
Objectives .....	2
Methodology .....	2
Curlew.....	3
Lapwing .....	4
Anecdotal Evidence for the Decline of Lapwing and Curlew .....	5
Kestrels.....	5
Other Target Species.....	5
Lapwing and Curlew on the Long Mynd.....	7
Decline of Lapwing and Curlew .....	7
Comparison of CWG Bird Survey Results with the Shropshire Bird Atlas 2008-13.....	9
Use of CWG Survey Results .....	10
Work with Individual Farmers .....	10
Recommendations .....	10
Other Community Wildlife Groups.....	11
Acknowledgements.....	11
Summary 2017.....	11
Plans for 2018 .....	12
Further Information .....	12
Appendix 1. Map of Survey Area, showing Square Boundaries and Tetrad Codes	13
Appendix 2. Detailed Survey Results .....	14

## STRETTONS AREA COMMUNITY WILDLIFE GROUP

The Group was established in March 2012, to bring together people interested in wildlife, undertake survey work to establish the status of priority wildlife and habitats, encourage and enhance local interest in wildlife and actively promote nature conservation.

The Annual Public Meeting in early March 2017 agreed to conduct a Lapwing and Curlew survey, to complement similar surveys carried out by Community Wildlife Groups in other parts of the Shropshire Hills. Both species have suffered a massive contraction in range and population decline in the last 20 years or so, nationally and locally. Curlew has been described as the UK's highest bird conservation priority, as we have an estimated 28% of the European breeding population, and 19 – 27% of the world population.

The AGM of the Church Stretton branch of the Shropshire Ornithological Society also agreed to support the survey.

An Introductory leaflet, outlining the reasons for the survey and how it would be carried out, with an appeal for volunteers and publicising the launch meeting, was sent out by email to all members both Groups, and an article was published in Stretton Focus.

The launch meeting to launch the project was held on 15 March 2017. It included a presentation on the methodology and results of similar surveys carried out by Community Wildlife groups in the Shropshire Hills since 2004, which showed that the populations had continued to fall here following the Bird Atlas surveys carried out in 2008-13. It also covered arrangements for the survey in the Strettons area.

The meeting was well attended, and most people present agreed to help. Several other people, who were unable to come to the meeting, also volunteered. In total, 44 people, including 5 couples, did survey work.

## **CURLEWS, LAPWINGS AND OTHER BIRDS SURVEY**

### **Objectives**

Participants were asked to find out where Curlew and Lapwing occur in the breeding season, record behaviour indicative of breeding, and record other species, most of which are of nature conservation importance (i.e. they are Target Species for Government Agri-environment Schemes operated by Natural England, or they are on the *Red List* or *Amber List of Birds of Conservation Concern* in the UK because they have suffered large declines in the last 25 or 50 years, and / or are Target Species in the national Biodiversity Action Plan).

In addition to Lapwing and Curlew, the target species were:-

- |                  |                           |                      |
|------------------|---------------------------|----------------------|
| • Kestrel        | • Cuckoo                  | • Spotted Flycatcher |
| • Red Kite       | • Dipper                  | • Tree Sparrow       |
| • Barn Owl       | • Swift (nest sites only) | • Linnet             |
| • Grey Partridge | • Yellow Wagtail          | • Bullfinch          |
| • Snipe          | • Dunnock                 | • Yellowhammer       |
| • Skylark        | • Wheatear                | • Reed Bunting       |
| • Meadow Pipit   | • Stonechat               |                      |

This was the first year in which a bird survey was carried out in this area. It is intended to repeat it annually, to monitor long-term population trends for key species, as well as establish the current population and distribution, and use the results to promote conservation and attempt to reverse the decline.

### **Methodology**

Part of the area covered by the Community Wildlife Group, and an additional area to the east with suitable habitat for both main target species, was divided up into 30 tetrads (2x2 kilometre squares, each made up of four of the one-kilometre squares shown on Ordnance Survey maps). A map showing these tetrads, and the reference code, is attached (Appendix 1).

People who agreed to help were allocated a square / tetrad, and requested to survey it once during each of three specified two week periods, around 1 April, 1 May and again around mid-June.

- The first period follows the arrival of Lapwing and Curlew back on the breeding grounds. This is the best time to find breeding Lapwing (first egg date is usually around 1<sup>st</sup> April).
- The second period is the best time to find breeding Curlew (first egg date is usually around 30<sup>th</sup> April).
- The third period is timed to find any Curlews that have successfully hatched and still have chicks. It is also the best time to find the Other Target Species.

Each survey visit concentrated on suitable habitat for the two main target species, and was expected to take around three hours. Participants were provided with detailed survey instructions, and a large scale map of the tetrad (the map filled an A4 sheet of paper) for each survey. The aim was to establish the number of territories (number of breeding pairs) for Lapwing and Curlew, not to find the nest. All survey work was carried out from public rights of way, unless landowners' permission was obtained to look in specific fields.

A practical fieldwork training meeting was held for those that wanted one, on Saturday 25 March. About a dozen participants attended.

A feedback meeting was held on 7 June, to present the results of the first two surveys, discuss them, provide clarification where necessary, and iron out any difficulties experienced by the participants; most survey participants attended.

Survey work was carried out in all 30 tetrads, and members spent over 330 hours on it. This represents an excellent effort

## **Curlew**

The map in Appendix 2 on page 14 shows the location of all Curlews seen during the surveys, and casual records supplied by surveyors and other people. The map on page 4 presents the analysis of the observations, and summarises the estimated number and location of Curlew territories.

The methodology requires observations of a pair together, or a single bird on two of the three surveys, to confirm a territory. However, Curlews often have large territories, and may be seen a kilometre or more from their nest site. Curlews seen up until early April (including during the first survey) may be passing through on their way to breeding sites elsewhere. Nesting does not usually occur until late April or early May. Therefore, interpretation of the observations is sometimes difficult, unless singing birds are seen or heard concurrently. If that does not happen, the methodology requires the analysis to produce the lowest population estimate consistent with the records.

One, two or three Curlew seen in the early period in SO49U, V, Y and Z, were probably passing through. All were seen on surveys (those in SO49Y and Z in flight only).

There were definite breeding pairs in SO49W and SO59H (2 pairs), and local residents said they had breeding Curlews at these sites last year. The pair in SO49X was seen on an annual BTO Breeding Bird Survey (BBS), and was also reported by two farmers, one on several occasions, but 2008 was the last time a pair was seen on the BBS, and that was the only sighting of a pair on that BBS this century.

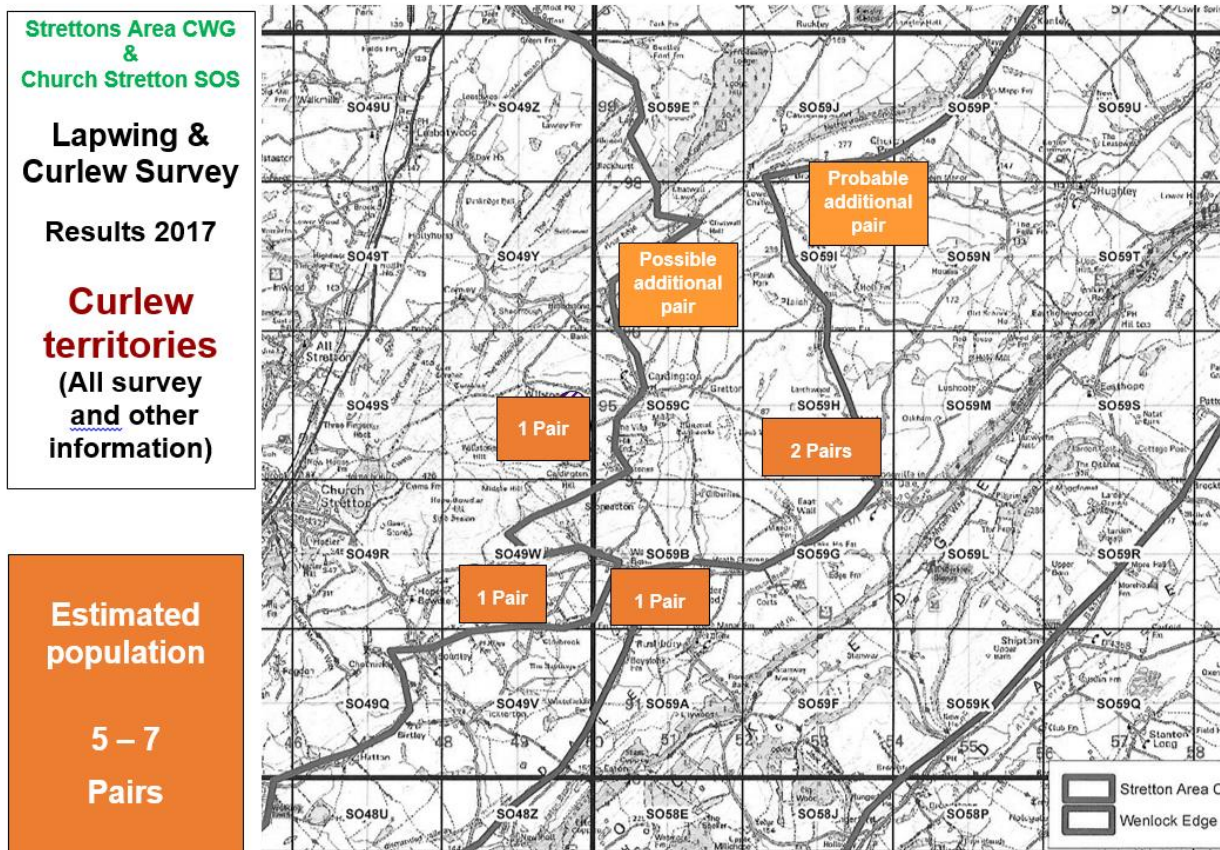
There were also reports of a pair near Wall (SO59B), where one resident heard Curlews “all the time”, and another resident reported a successful nest there.

In addition, a pair was seen regularly between mid-March and May near Church Preen, in SO59I, by a local resident, which might have been the same pair seen nearby on the first survey, in SO59P; and one bird was seen feeding on three separate dates at the end of April and early May near Enchmarsh (SO59D), so this is probably a feeding area for a pair nearby that was not located. Efforts should be made to locate these pairs in all three of these areas in 2018.

Experience of undertaking this type of survey with more long-standing Community Wildlife Groups suggests that, in future years, evidence will be found to confirm that there are more than 5 pairs.

**From the observations and analysis, it is estimated that the Curlew population in the area is definitely 5 pairs, probably 6, possibly 7 and perhaps more**





The survey should be repeated in 2018, and subsequent years, to clarify the number of pairs actually present, and the location of nest sites and foraging areas, and work towards regular monitoring to establish a population trend.

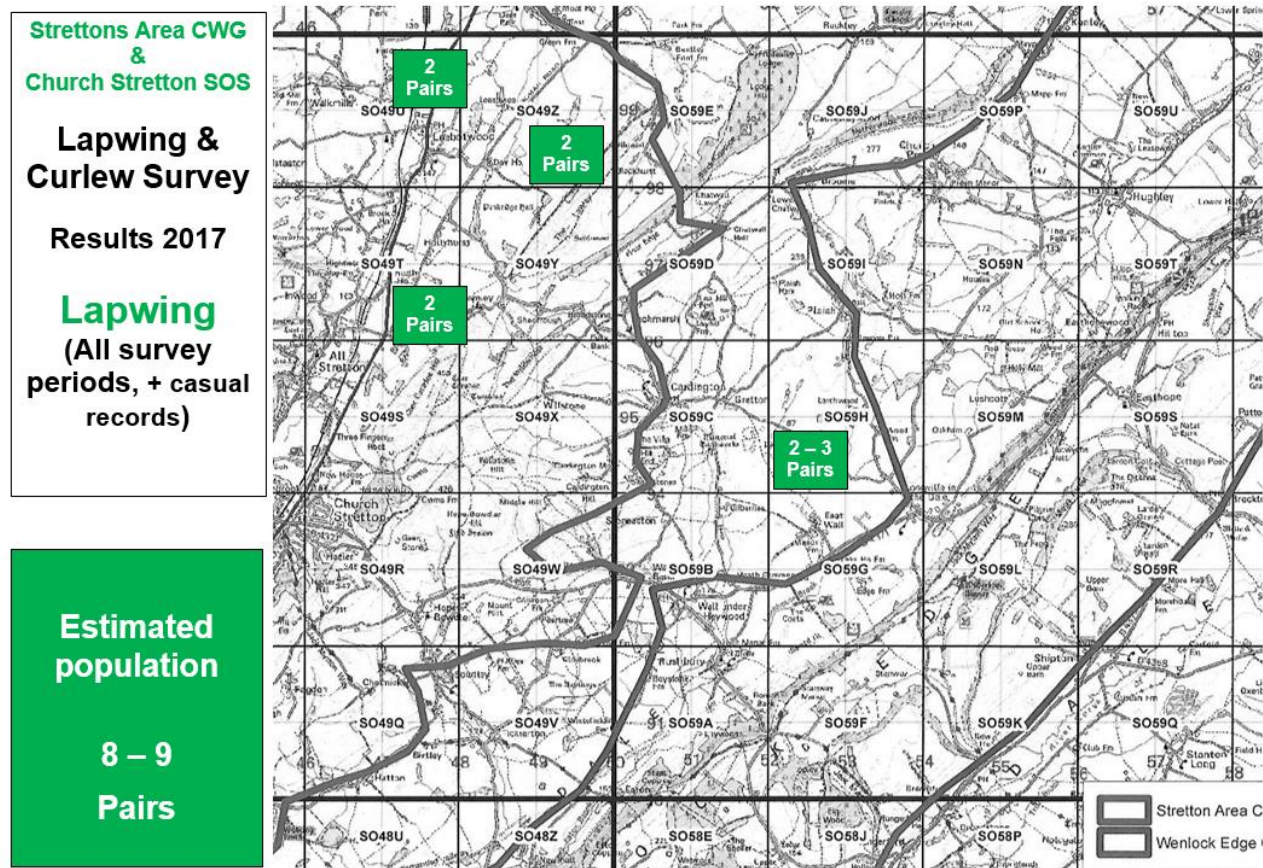
## Lapwing

The location of Lapwings found during the surveys is shown on page 5.

Initially there were four Lapwings (probably two pairs) in SO49V, although a local resident thought there might have been three pairs. On 19 June there were 12 Lapwings, at least 4 adults and 6 fledged young.

Failed pairs form post-breeding flocks, and 9 were seen together over Enchmarsh (SO59D) on 1 June, and 20 were seen near Longville in SO59H on 13 July, both flocks in flight. While obviously these Lapwings might have attempted to breed outside the area, the size of the flocks suggests that there might be more breeding pairs to find.

**From the observations and analysis, it is estimated that the Lapwing population in the area is 8 - 9 pairs, perhaps more**



## ***Anecdotal Evidence for the Decline of Lapwing and Curlew***

Participants who live in the area, and other local residents, say that Lapwings and Curlews are less common now than they used to be. Some members talked to local farmers in the course of their surveys, and they too said that Lapwings and Curlew are less common now than they used to be.

## ***Kestrels***

A nest box scheme and colour-ringing project is planned for Kestrels, as they too have declined considerably in recent years. Therefore, participants were requested to make an effort to record Kestrels. The observations are shown on the map on p7.

A pair was located near Longville, which produced three fledged young. This pair probably accounts for the large number of sightings nearby. Otherwise, there was a pair on the edge of SO49V, resident in or near Gogbatch, and another pair near Church Preen, plus sightings indicating additional pairs near Hazler / Ragleth Hills, Caer Caradoc and The Lawley. The status of other sightings near Cardington Hill and Shipston is less clear.

**The population is estimated at 6 – 8 pairs.**

## ***Other Target Species***

The other Target Species recorded during the surveys are summarised in Table 1 below.

As expected in a survey of this type, the expertise of members, and the time they had available to undertake the surveys, varied considerably. The primary aim was to look for Lapwing and Curlew, and all participants were familiar with both species, but several participants made no attempt to look for, or record, the other target species.

The survey squares also vary considerably, in accessibility and terrain. The “detectability” of the birds themselves also varies considerably, according to prevailing weather conditions, time of day, stage in the breeding cycle, and the normal behaviour of each species. Thus the survey results will give an indication of the species present, and perhaps their habitat preferences, but only a very small proportion of the total population will have been recorded.

Note that participants were asked to record individual birds, not pairs (so at some locations both the birds in the pair were recorded, and in the final survey some recently fledged juveniles may have been recorded as well).

The summary table shows the maximum count for each species on any one survey in each tetrad. This may under-record some species, but the alternative – adding all the counts together – would lead to considerable double or triple counting of some individual birds. The results of every survey are shown in Appendix 3.

**Table 1. Other Target Species – Summary**

Square (tetrad)	Maximum Number of Each Species Recorded															
	Lapwing	Curlew	Kestrel	Red Kite	Skylark	Meadow Pipit	Cuckoo	Swift (sites)	Dunnock	Wheat-ear	Stone-chat	Spotted Fly-catcher	Tree Sparrow	Linnet	Bull-finch	Yellow-hammer
SO49 Q				1	4				6							4
SO49 R				1	1				4						2	3
SO49 S			1	1	1	2	1		2	2	2			2		
SO49 T	10		2						1					1		
SO49 U	4	3							1							
SO49 V		2														
SO49 W		1			3											
SO49 X				1	1				1	2						1
SO49 Y		2	1	1	7	3	1		1		1					5
SO49 Z	2															
SO59 A					1				4							10
SO59 B									1							
SO59 C	No target species seen or heard															
SO59 D				1	2											1
SO59 E				1	2	2			2					1	1	1
SO59 F				1	6				2					2		3
SO59 G	4		2		3				2						1	4
SO59 H	5	6	1		4					2						1
SO59 I					5											
SO59 J									2						1	
SO59 K									1							
SO59 L					1			6	1							
SO59 M					2				4							3
SO59 N					1				10						1	10
SO59 P		2	2		6				7			2				4
SO59 Q															1	
SO59 R			1						1	1						2
SO59 S					4											1
SO59 T					2											
SO59 U		1	1	1												
Total	25	17	12	10	58	8	2	6	54	7	5	2	2	6	7	55

Most species were found only in small numbers, but Skylark, Dunnock and Yellow-hammer were found in good numbers, and in more than half the survey squares.

Red Kite was seen in 10 tetrads, all east of the A49. The first successful breeding in Shropshire for 130 years occurred as recently as 2006, but there are well over 30 pairs now. Breeding was not recorded east of the A49 until 2012, so the population is spreading, and it is likely that breeding will become a regular occurrence in the near future.

An estimate was submitted of the number of Skylark and Meadow Pipit on Ragleth Hill, where they have been seen for many years. There are now not less than 6 pairs, possibly up to 8-10 pairs, of the former, mainly on the top of the hill, and not less than 10 pairs,



possibly up to 15 – 20 pairs, of the latter, on the top and on the slopes (John Bacon *pers.comm.*).

Only three species were not recorded at all, Grey Partridge, Snipe and Dipper. Their absence is not surprising. Grey Partridge is now virtually extinct in Shropshire; Snipe is restricted to upland bog, but there were 5 drumming males on Long Mynd, the most for many years; and Dipper habitat would not be visited much in the survey, but there is a pair on the brook in All Stretton.

One species was recorded only once, a Barn Owl on the first survey in SO59N.

There were only two records of Cuckoo, not surprising in view of a 69% decline in England between 1995 and 2015. The Swift population in England has declined by 50% over the same period. They were found at Wilderhope Manor, one of the largest local colonies. Swifts in the Strettons are the subject of a separate SACWG survey (see the Annual Report, or the website [www.ShropsCWGs.org.uk](http://www.ShropsCWGs.org.uk) for details).

### ***Lapwing and Curlew on the Long Mynd***

The Long Mynd is part of the Strettons Area Community Wildlife Group area, but it was not included in the survey, as it is covered by a different Breeding Bird Survey.

It is not suitable habitat for Lapwing, and none are known to have nested there during the 1985-90 Bird Atlas, or since.

It is suitable habitat for Curlew and there was evidence of breeding in most tetrads during the 1985-90 Bird Atlas. The Long Mynd Breeding Bird Project surveyed the whole site in 1994-98, and estimated a dozen pairs in 1995. This had declined to only two pairs in 2004, and it has fluctuated between one and three pairs since. In 2017 three pairs were found, on Pole Bank, Wild Moor and near High Park. Predated egg shells were found on Wild Moor, and the other two pairs are also believed to have failed early, at the egg stage.

### ***Decline of Lapwing and Curlew***

In England, Lapwing and Curlew are in decline, nationally, and in Shropshire. Objective evidence for this comes from Bird Atlas work, and the Breeding Bird Survey carried out each year by the British Trust for Ornithology (BTO), and the summary tables in the annual *State of the UK's Birds*.

In the UK, Curlew has declined by 64% between 1970 and 2014, and 48% between 1995 and 2015. In England the decline has been 31%, and in Wales 68%, between 1995 and 2015.

Lapwing has declined by 63% in the UK between 1970 and 2014, and 25% between 1995 and 2015. In England the decline has been 31%, between 1995 and 2015. The decline in Wales since 1995 has been so large that there is insufficient data now to calculate a change.

Shropshire Ornithological Society undertook six years fieldwork between 1985 and 1990, and covered all 870 tetrads in the County. The results were published in *An Atlas of the Breeding Birds of Shropshire* in 1992. The survey was repeated in 2008-13, with similar amounts of fieldwork effort, and the Atlas maps produced are directly comparable.

The resulting breeding distribution change maps for the survey area are shown below. The grid lines enclose the 10km squares SO49 and SO59 on the Ordnance Survey National Grid, and each symbol represents a tetrad (2x2km square on the OS grid, 25

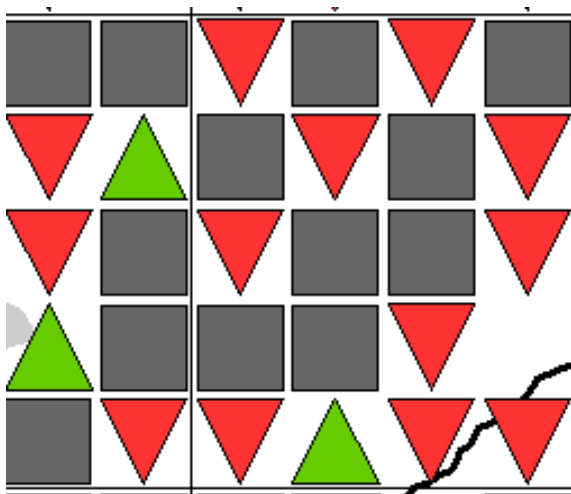


tetrads in each 10km square). These squares are the same as those used for this survey. The background pale grey shape on the left hand side of map, is the eastern part of the town of Church Stretton.

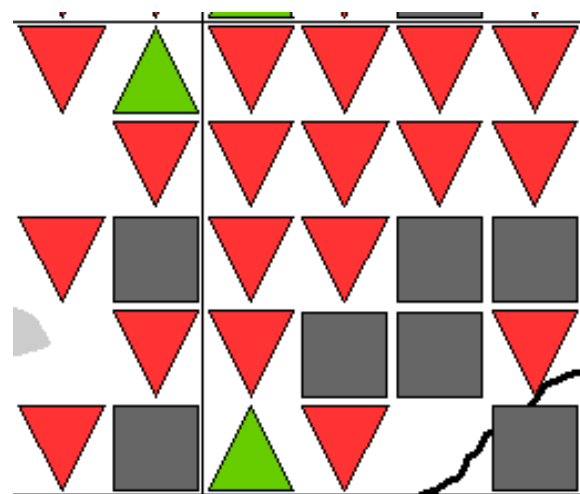
Tetrads where each species was found in both Atlas surveys are shown as grey squares, and tetrads where it was found in the earlier period, but not the more recent period are marked with red downward triangles. It will be seen that the range of both species has declined substantially in this area in only 20-25 years.

#### Breeding Distribution Change Maps for the Strettons survey area (1985-90 to 2008-13)

##### Curlew



##### Lapwing



Maps copyright Shropshire Ornithological Society. Not to be reproduced without prior permission

Surveys including counts complement these maps. The county Lapwing population has fallen from about 3,000 pairs in 1990 to only about 800 in 2013, a decline of around 70%. The Curlew population has fallen from about 700 pairs in 1990 to about 160 pairs in 2010 (a 77% decline).

Surveys carried out by several other Community Wildlife Groups suggest that the population has fallen further since 2010.

Other evidence for the decline of Lapwing and Curlew can be found on the website of the British Trust for Ornithology [www.bto.org](http://www.bto.org)

Action to reverse the declines must start by improving the breeding success of the remaining pairs, so conservation action in the areas where they are still found, such as the Strettons area, is vital. Such action is being taken, nationally and locally. Both species have been designated as UK Biodiversity Priority Species by the Government, as part of its commitment to international biodiversity targets, precisely because of the rapid decline.

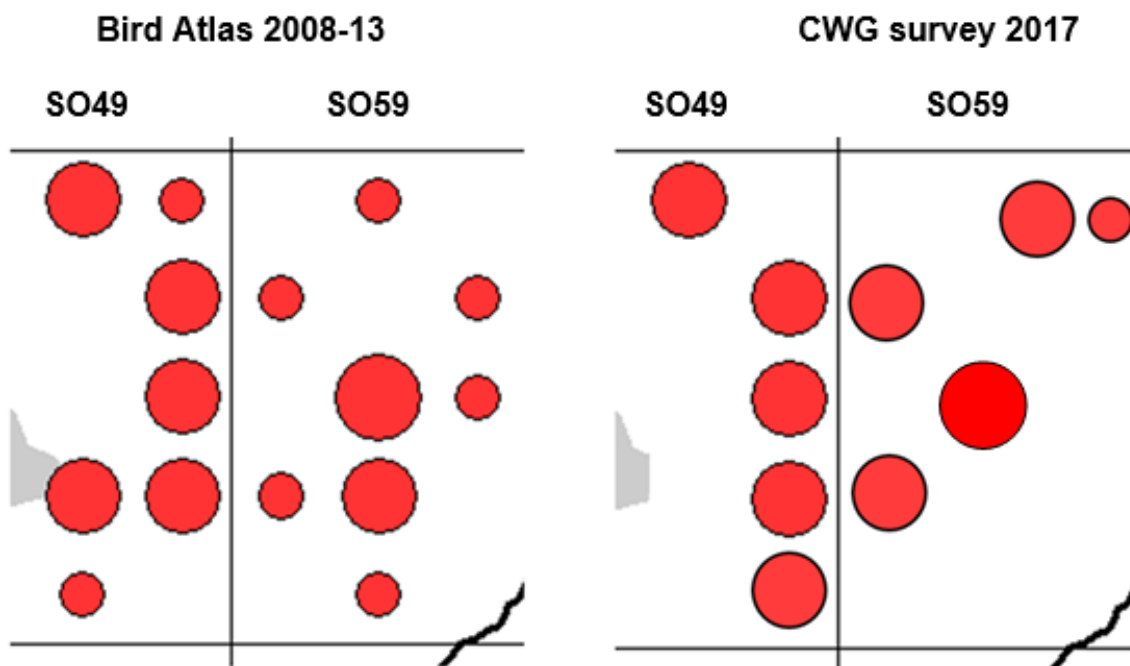
Both species nest on farmland, and the Countryside Stewardship Agri-environment Scheme (part of the system of payments to farmers through the Common Agricultural Policy of the European Union) includes provision to reward farmers for sensitive management of habitat on their farms, and providing other environmental benefits. ES includes specific prescriptions, and payments, for Lapwing and Curlew habitat, if the farmer wants to apply, and the application is successful.

## Comparison of Strettons Area CWG Bird Survey Results with the Shropshire Bird Atlas 2008-13

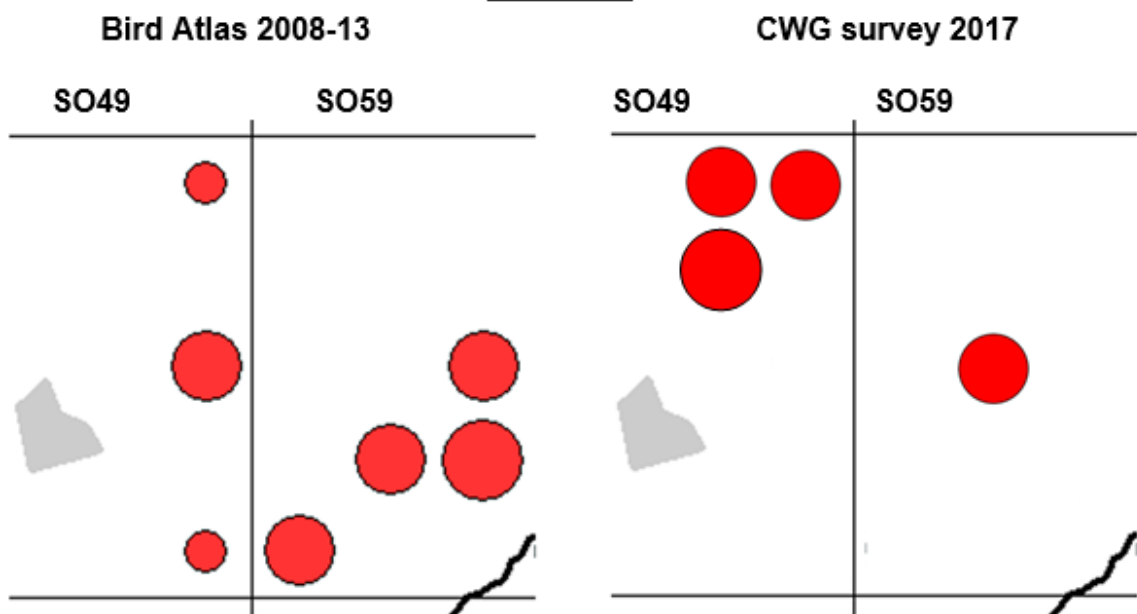
The next two pairs of maps show, on the left, the results of the Bird Atlas 2008-13 for the 30 tetrads covered by the survey, and, on the right, the results of the survey in the Strettons area as shown on the maps on pages 5 and 6. Each dot represents at least one observation during the Atlas period, or during the 2017 survey, in the appropriate tetrad.

- Large dot = Confirmed Breeding (Bird seen sitting on nest, or chicks seen)
- Middle dot = Probable Breeding (Pair or display seen)
- Small dot = Seen or heard in suitable habitat
- No dot = Not found

### Curlew



### Lapwing



It must be stressed that the Atlas map includes survey work over six years, not one, but most tetrads will not have been visited every year, it was only necessary to find confirmed breeding evidence once in the six years, and the surveyors were looking for breeding evidence for all species. On the other hand, the Bird Atlas maps are a record of what was found, and do not include the judgement to eliminate likely passage birds (the difference in the number of occupied squares in the maps on page 4 and Appendix 2). It is unlikely that the 2017 survey found all the pairs, and results should improve as surveyors get to know their squares better, and more people find out about the survey and contribute records or information. It is likely to take 2-3 years to build up a complete picture.

However, the two target species are conspicuous and noisy, so most will not have been overlooked, and these maps suggest strongly that the decline of both species has continued over the last 10 years, since the Atlas started, in this area too.

## ***Use of CWG Survey Results***

Most importantly, the survey results are made available to Natural England. They show the importance of particular areas for these species, which will hopefully encourage farmers to manage their land more sensitively, and provide Natural England with objective evidence to judge individual farm applications to join Countryside Stewardship, and information to target the use of their limited resources more effectively.

The results also reinforce and supplement the results from other Community Wildlife Groups, which together now cover well over 600 square kilometres, around two-thirds of the Shropshire Hills AONB. These results help inform the AONB Management Plan, which currently covers the five years 2014 – 19. It is about to be updated.

Coupled with the results of other surveys, the results may also contribute to the identification of potential new County Wildlife Sites. These sites are monitored by Shropshire Wildlife Trust, which encourages the landowners to manage the sites sensitively, so they retain their value for wildlife.

Shropshire Wildlife Trust and Shropshire Ornithological Society are leading a “Save our Curlews” Campaign, funded by a joint Appeal. See <http://www.shropshirebirds.com/save-our-curlews/>

Members of SACWG and Church Stretton SOS are encouraged to donate to the Appeal.

It is hoped that, once this survey has located the Curlew breeding territories in the area, efforts will be made to find and protect Curlew nests.

## ***Work with Individual Farmers***

The vast majority of the Lapwing and Curlew populations in the area nest on private farmland. The active support of farmers is therefore essential if the declines are to be reversed. As our knowledge builds up, efforts will be made to work with individual farmers to safeguard their habitats. This will be particularly important for finding and protecting Curlew nests.

## ***Recommendations***

***Natural England is recommended to encourage farmers with breeding Lapwing or Curlew on or near their land, to join the Countryside Stewardship Scheme, utilising the appropriate options to maintain and enhance the habitat for these priority species***



## **Other Community Wildlife Groups**

The first Group, the Upper Onny Wildlife Group, first surveyed Lapwing and Curlew in 2004, and has done so every year since. Upper Clun CWG started in 2007, Kemp Valley in 2009, Clee Hill CWG in 2012, and Rea Valley and Camlad CWGs (part of the Stiperstones-Corndon HLF funded Landscape Partnership Scheme) in 2014. Further information can be found the joint website for all the Community Wildlife Groups in the Shropshire Hills, [www.ShropsCWGs.org.uk](http://www.ShropsCWGs.org.uk)

The first Community Wildlife Group outside the Shropshire Hills, covering the Three Parishes of Weston Rhyn, St Martin's and Gobowen (north of Oswestry) was established in November 2016, and also conducted a Lapwing and Curlew survey in 2017.

## **Acknowledgements**

Most importantly, thanks to the Group members who undertook the survey work:-

John Arnfield	Jude Duffy	Brian Santry
John Bacon	Nigel Green	Peter Stephenson
Steve Baker	Kerri & June Holloway	Lorna Taylor
John Bent	Jim Jarrett	Vivienne & Peter Thorpe
Michael Bowler	David John	Robin Trew
Steve Butler	Tony Jones	Caroline Uff
Ian Cheeseborough	Carol Lyons	Jenny Vine
John Corfield	Stephen & Margaret Mitchell	Dick Ward
Mags Cousins	Andrew Morton	Michael White
Stuart Cowper	Roger Owen	Sandra & Peter Whitlock
Judith Darling	Ron Parnell	Mike Worthington
Gill Davies	Ian & Jill Plumridge	
Malcolm Dixon	Steve & Sue Rooney	

Special thanks to John Arnfield, who helped organise the meetings, distribute information to members, and co-ordinate the work.

Thanks also to:-

- Jonathan Groom, Shropshire Council Biodiversity Data Officer, who provided the survey maps.
- Jude Duffy, for investigating locations for the Training Session, and Nigel Green and Wenlock Edge Farm Shop, for car parking facilities
- Gill Davies, for making several additional survey visits to monitor the Curlews with chicks
- John Bacon, for the information about Skylark and Meadow Pipit on Ragleth Hill

## **Summary 2017**

*This report summarises a very successful first year for the Bird Group. Members showed a high level of commitment in carrying out the surveys.*

*All 30 tetrads were surveyed, and we now have a better understanding of the population and distribution of Lapwing and Curlew, and the status of the Other Target Species.*

*The populations in the area are estimated at 8 - 9 pairs of Lapwing, and at least 5, possibly 7 pairs of Curlew*

*This is valuable information for the conservation of these birds. Further survey work in future years will add to this baseline, and establish population trends.*

## ***Plans for 2018***

The Group intends to repeat the Bird Survey next year. New participants are needed, so we hope to recruit new members.

A meeting at 7.30pm on Tuesday, 20<sup>th</sup> March 2018 at the Methodist Church Hall, Watling Street, Church Stretton will receive a presentation of the results in this report, and plan the 2018 survey.

Everyone interested in birds is welcome to participate.

## ***Further Information***

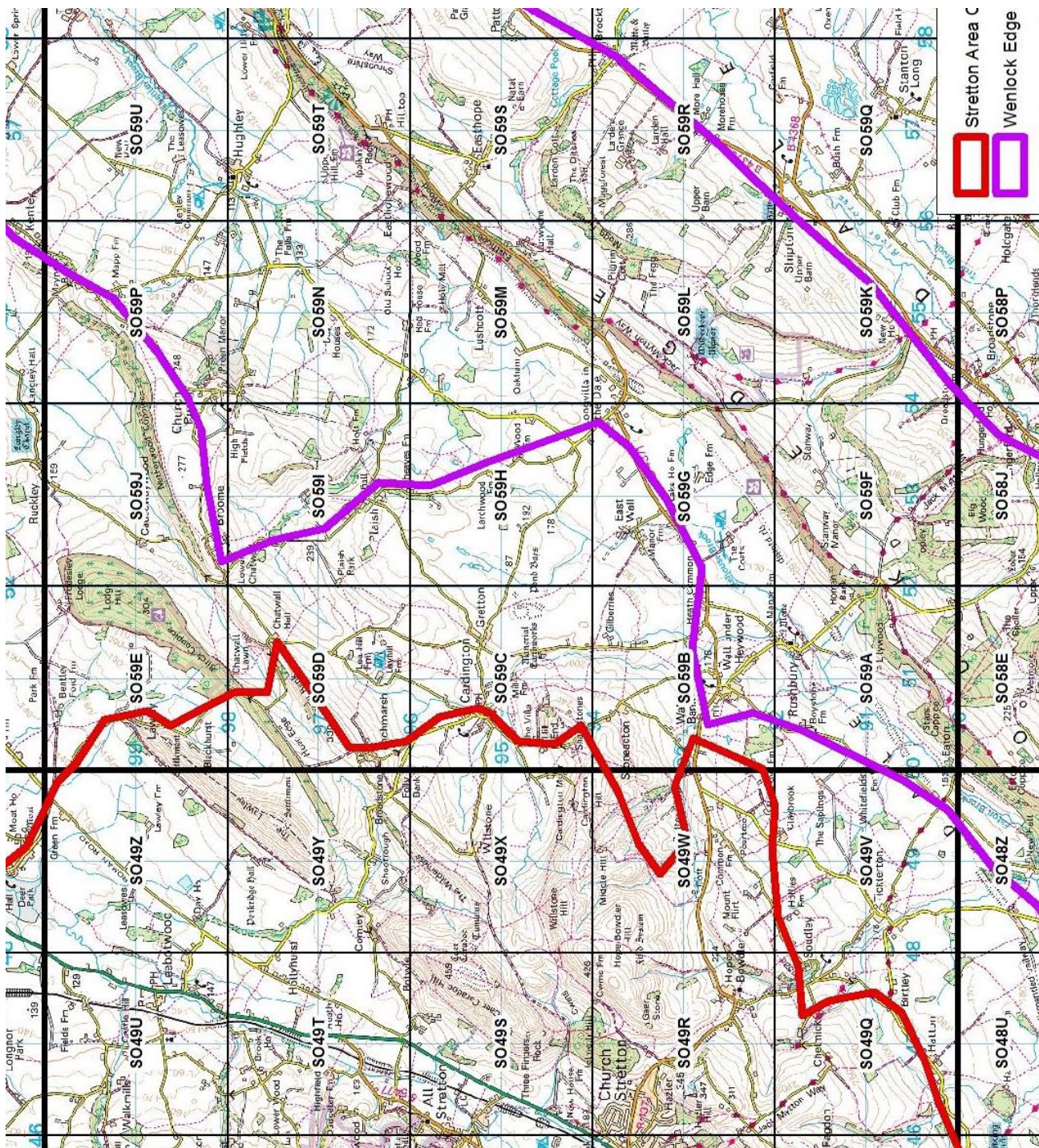
- Leo Smith      [leo@leosmith.org.uk](mailto:leo@leosmith.org.uk)      01694 720296
- Nigel Green    [nigel662@btinternet.com](mailto:nigel662@btinternet.com)    01694 722043
- John Arnfield   [arnfield.2@osu.edu](mailto:arnfield.2@osu.edu)      01694 724170

Further copies of this report can be downloaded from the Community Wildlife Groups website, [www.ShropsCWGs.org.uk](http://www.ShropsCWGs.org.uk), or obtained from Leo Smith

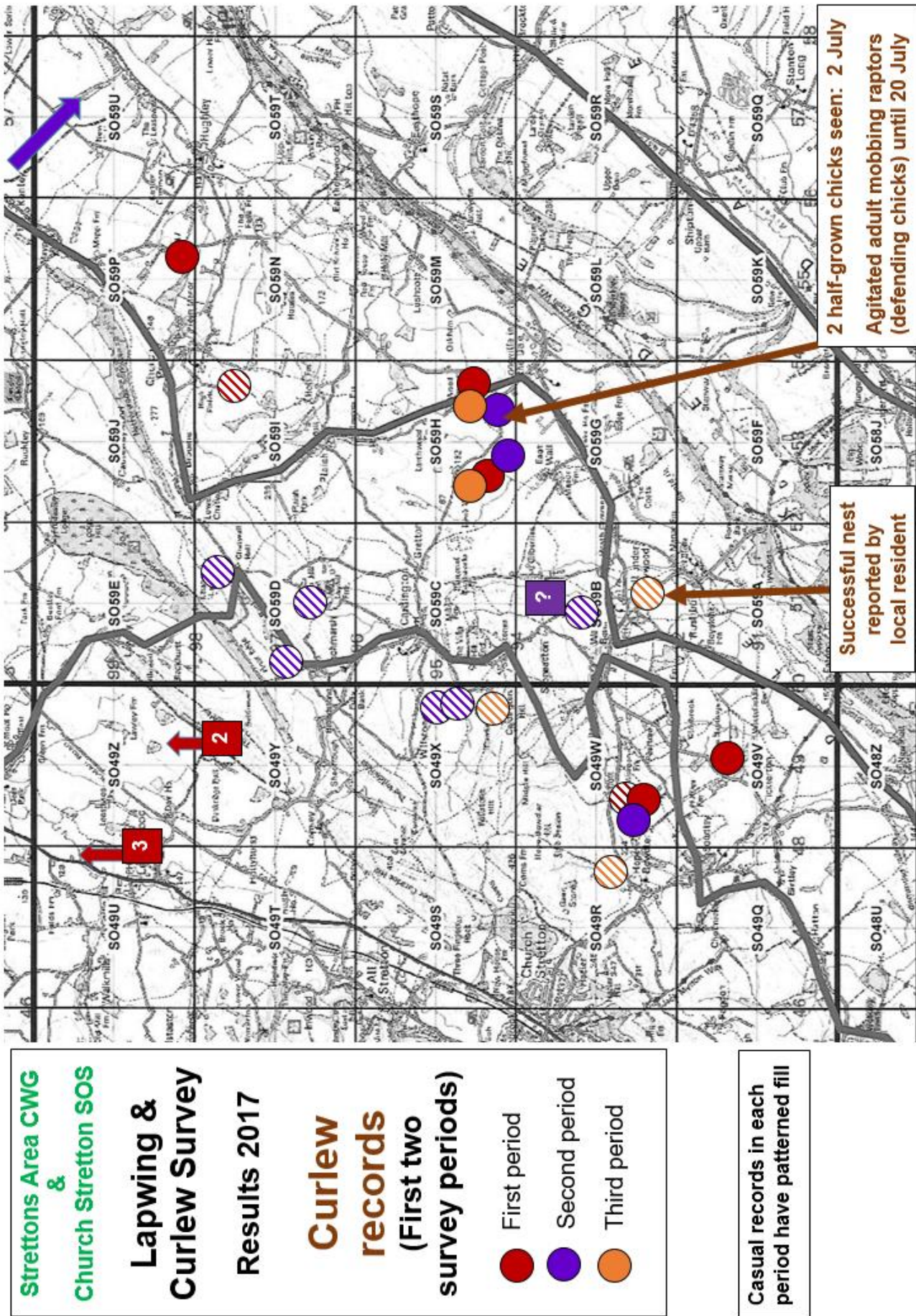
Leo Smith  
February 2018



## Appendix 1. Map of Survey Area, showing Square Boundaries and Tetrad Codes







## Appendix 3. Detailed Survey Results

First survey period (25 March - 9 April)

Square (Tetrad)	Surveyor	Time		Number of Each Species Recorded													
		Hrs	Mins	Lapwing	Curlew	Kestrel	Red Kite	Skylark	Meadow Pipit	Cuckoo	Duncock	Wheatear	Stone- chat	Linnet	Bullfinch	Yellow- hammer	
SO49 Q	Ron Parnell	2	45				1	4			3					3	
SO49 Q	Kerri & June Holloway	3	15					1									
SO49 R	Michael Bowler	3	35				1				2					3	
SO49 S	David John	3	0						1				2				
SO49 S	Dick Ward	3	45			1			1				2				
SO49 S	Sandra & Peter Whitlock	6	0				1										
SO49 T	Mags Cousins	2	30	2		2					1						
SO49 U	Brian Santry	5	45	4	3						1						
SO49 V	Peter Stephenson	4	30		2												
SO49 W	Carol Lyons	2	40					2									
SO49 W	Nigel Green	4	0		1												
SO49 X	Jim Jarrett and Steve Butler	3	15					1	1							1	
SO49 Y	Caroline Uff and Ian Cheeseborough	3	0		2				1								
SO49 Z	Steve & Brenda Baker	3	30	No target species seen or heard													
SO49 Z	Tony Jones	4	5	No target species seen or heard													
SO59 A	Steve & Sue Rooney	4	30						1			4				10	
SO59 B	Vivienne & Peter Thorpe																
SO59 C	Nigel Green	4	30	No target species seen or heard													
SO59 D	John Bent	4	30	No target species seen or heard													
SO59 E	Malcolm Dixon	3	10						2	2		2			1	1	1
SO59 F	Andrew Morton	4	45						6			2			32+		
SO59 F	Lorna Taylor	6	0					1									
SO59 G	Jude Duffy	6	10			2			3			2				1	4
SO59 G	Gill Davies																
SO59 H	Gill Davies	4	10	4	6	1			4								1
SO59 I	Roger Owen	4	30						5								
SO59 J	Roger Owen	3	45									2				1	
SO59 K	Jenny Vine	2	45	No target species seen or heard													
SO59 L	John Arnfield	3	15						1			1					
SO59 M	John Bacon	2	45									4					2
SO59 N	Michael White & Sue Pugh	3	5									1					
SO59 N	Ian & Jill Plumridge	10	0									9					
SO59 P	Ian & Jill Plumridge	4	0		2	2			2			3					1
SO59 Q	Stuart Cowper	4	0	No target species seen or heard													
SO59 Q	Jenny Vine	3	9	No target species seen or heard													
SO59 R	Steve & Judith Darling	3	5	No target species seen or heard													
SO59 S	Robin Trew	2	30						4								1
SO59 T	Stephen & Margaret Mitchell	3	30						2								
SO59 U	Sue & Mike Worthington																
		143	39	10	16	8	5	39	4	0	37	0	4	1	3	27	

Second Survey period (22 April - 7 May)

Square (Tetrad)		Surveyor	Time		Number of Each Species Recorded												
			Hrs	Mins	Lapwing	Curlew	Kestrel	Red Kite	Skylark	Meadow Pipit	Cuckoo	Duncock	Wheatear	Stone- chat	Linnet	Bullfinch	Yellow- hammer
SO49 Q	Q	Ron Parnell	2	30					1				6				4
SO49 Q	Q	Kerri & June Holloway	2	50	No target species seen or heard												
SO49 R	R	Michael Bowler	3	10					1				4				
SO49 S	S	David John	2	0								1			1		
SO49 S	S	Dick Ward	3	30					1	1	1		2		1	2	
SO49 S	S	Sandra & Peter Whitlock			Survey not undertaken												
SO49 T	T	Mags Cousins	2	0	4								1				
SO49 U	U	Brian Santry	5	0	2	2											
SO49 V	V	Peter Stephenson	3	0	No target species seen or heard												
SO49 W	W	Carol Lyons	2	50						3							
SO49 W	W	Nigel Green	3	0		1											
SO49 X	X	Jim Jarrett and Steve Butler	3	10					1				1	2			1
SO49 Y	Y	Caroline Uff and Ian Cheeseborough	5	0					1			1			1		2
SO49 Z	Z	Steve & Brenda Baker	2	50						1							
SO49 Z	Z	Tony Jones	4	15	2												
SO59 A	A	Steve & Sue Rooney	3	0						1							
SO59 B	B	Vivienne & Peter Thorpe	4	0		1?						1					
SO59 C	C	Nigel Green	3	30	No target species seen or heard												
SO59 D	D	John Bent	3	0						1							1
SO59 E	E	Malcolm Dixon	2	55					1	2							
SO59 F	F	Andrew Morton	4	45						2			2				3
SO59 F	F	Lorna Taylor															
SO59 G	G	Jude Duffy	3	15						2							
SO59 G	G	Gill Davies	2	0				1									
SO59 H	H	Gill Davies	3	50	5	3				1				2			1
SO59 I	I	Roger Owen	2	30						3							
SO59 J	J	Roger Owen	2	45	No target species seen or heard												
SO59 K	K	Jenny Vine	2	30									1				
SO59 L	L	John Arnfield	3	5								1					
SO59 M	M	John Bacon	3	15						2							3
SO59 N	N	Michael White & Sue Pugh	3	5	No target species seen or heard												
SO59 N	N	Ian & Jill Plumridge	3	30						1			10				10
SO59 P	P	Ian & Jill Plumridge	4	0						5			6				3
SO59 Q	Q	Stuart Cowper	2	30	No target species seen or heard												
SO59 Q	Q	Jenny Vine	2	45												1	
SO59 R	R	Steve & Judith Darling	2	30				1					1	1			2
SO59 S	S	Robin Trew	3	0	No target species seen or heard												
SO59 T	T	Stephen & Margaret Mitchell	2	30	No target species seen or heard												
SO59 U	U	Sue & Mike Worthington				1	1	1									
			112	75	13	7	3	6	26	1	2	36	5	3	2	2	32

## Appendix 3. Detailed Survey Results (continued)

Third Survey period (10 - 25 June)

Square (Tetrad)	Surveyor	Time		Number of Each Species Recorded												
		Hrs	Mins	Lapwing	Curlew	Kestrel	Red Kite	Skylark	Meadow Pipit	Cuckoo	Duncock	Wheatear	Stone- chat	Linnet	Bullfinch	Yellow- hammer
SO49 Q	Ron Parnell	3	30	No target species seen or heard												
SO49 Q	Kerri & June Holloway	2	0	No target species seen or heard												
SO49 R	Michael Bowler	3	15	Survey not undertaken												
SO49 S	David John			Survey not undertaken												
SO49 S	Dick Ward	3	0						2			2	2			
SO49 S	Sandra & Peter Whitlock			Survey not undertaken												
SO49 T	Mags Cousins	3	0	10										1		
SO49 U	Brian Santry	3	45	No target species seen or heard												
SO49 V	Peter Stephenson	2	40	No target species seen or heard												
SO49 W	Carol Lyons	1	30					lots								
SO49 W	Nigel Green			No target species seen or heard												
SO49 X	Jim Jarrett and Steve Butler	2	10	No target species seen or heard												
SO49 Y	Caroline Uff and Ian Cheeseborough	4	0				1	7	3		1		1			5
SO49 Z	Steve Baker	2	30	No target species seen or heard												
SO49 Z	Tony Jones			Survey not undertaken												
SO59 A	Steve & Sue Rooney			Survey not undertaken												
SO59 B	Vivienne & Peter Thorpe			Survey not undertaken												
SO59 C	Nigel Green			No target species seen or heard												
SO59 D	John Bent & John Corfield	4	15					1	2							1
SO59 E	Malcolm Dixon	2	45					1						1		1
SO59 F	Andrew Morton	4	0								2			2		1
SO59 F	Lorna Taylor			Survey not undertaken												
SO59 G	Jude Duffy			Survey not undertaken												
SO59 G	Gill Davies	1	30	4			1									
SO59 H	Gill Davies	10	45		2			2								
SO59 I	Roger Owen			No target species seen or heard												
SO59 J	Roger Owen			No target species seen or heard												
SO59 K	Jenny Vine			Survey not undertaken												
SO59 L	John Amfield	2	25					1								
SO59 M	John Bacon	2	30					1								
SO59 N	Michael White	2	30													2
SO59 N	Ian & Jill Plumridge	2	30								9				1	6
SO59 P	Ian & Jill Plumridge	3	15					6			7					4
SO59 Q	Stuart Cowper	2	30													
SO59 Q	Jenny Vine			Survey not undertaken												
SO59 R	Judith Darling	2	10													
SO59 S	Robin Trew			Survey not undertaken												
SO59 T	Stephen & Margaret Mitchell	2	30					2								
SO59 U	Mike Worthington	4	0													
		78	55	14	2	2	1	22	5	0	19	2	3	4	3	20