Clee Hill

Community Wildlife Group

Curlews, Lapwings & Other Birds Survey 2015

Curlews, Lapwings and Other Birds Survey 2015

CONTENTS

APPENDICES

Objectives

Bird Group members 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 Natural England's Environmental Stewardship Higher Level Scheme (HLS), are on the *Red List* or *Amber List* of *Birds of Conservation Concern* because they have suffered large declines in the last 25 or 50 years, and are Target Species in the UK Biodiversity Action Plan).

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

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

This repeated similar surveys undertaken in 2012 and 2013, to monitor population trends for key species, as well as establish the current population and distribution.

Methodology

The area covered by the Clee Hill Partnership was divided up into 20 tetrads (2x2 kilometre squares, made up of four of the one kilometre squares shown on Ordnance Survey maps). A map showing all these tetrads, with the Tetrad Reference code, is attached as Appendix

1. (The prefix SO (defining the 100 km square on the OS National Grid) has been omitted, as this is common to all the squares in the area).

People interested in helping were given a copy of the Outline Survey Instructions, attached as Appendix 2.

Those who agreed to help were allocated a square / tetrad, and requested to survey it once during each of three specified two week periods, around 1st April, 1st May and 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 1st April).
- The second period is the best time to find breeding Curlew (first egg date is usually around 30th 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.

Members were provided with a large scale map of their tetrad for each of the three periods, to record observations, and requested to spend around three hours on each visit. The survey Instructions were printed on the back of the map. These instructions are attached as Appendix 3. Members were also asked to record target species just beyond the boundary of their tetrad.

Members were also requested to send in “Casual Records” of Lapwing and Curlew seen at any time in the rest of the area, and also any seen in their own tetrad(s) outside the periods when the three tetrad surveys were being carried out. Casual Record maps were provided for this purpose.

Members were consulted on whether to hold a feedback meeting to present the results of the first two surveys, but most had undertaken survey work in previous years, and it was felt to be unnecessary. Interim results were sent out with the maps for the third survey at the end of May.

Last year, for the first time, some survey work was carried out in all 20 tetrads, but two tetrads (57U and X) received no coverage in 2015. However, priority was given to squares with Curlews, particularly the cluster around Cleeton St Mary (squares 67D, E and J), and at least two members surveyed those squares. A few other squares were also surveyed by more than one member, each doing their home square. Altogether, members spent over 210 hours on surveys (excluding the double time spent when couples or friends surveyed a square together), the highest ever figure. This represents an excellent effort.

Curlew

The location of all the Curlews found during the surveys, or reported on Casual Record maps, is shown in Appendix 4. These observations have been analysed, and the apparent number of territories is shown on page 5.

Analysis of the cluster of records in tetrads SO67D, E and I has been greatly helped by having survey observations from several members, and for the first time several records of concurrent observations of Curlews in different territories has allowed detailed analysis which confirms the presence of five pairs (a range of 3-5 or 4-5 has been found in previous years). These observations include 36 records from the diary kept at Pot House Farm, which again suggest one pair in square SO67I and the southern part of 67J, with a different pair in SO67D (Angela and Kirsty Mackirdy, *pers.comm*.).

Other observations separated this territory in 67D from another one spanning 67D and 67E west of The Blue Stone Farm and Aerial Cottage; another on Random Hill above Shirley Farm; and another west of Cleetongate in 67E.

A pair found in 57U and the southern part of 58Q was not relocated, but 57U was not surveyed. Another possible pair in 58V and 68A, east of Cleedownton, was not relocated during surveys, but two casual records of a single Curlew suggests that it might still be there.

There were many more observations in 67P, and 68F and K, than in any previous year. Two pairs were observed twice in 67P (Eric Davies, pers.comm), one the pair recorded in all previous years around Cramer Gutter / Botany Bay, but the other an apparently new pair to the south, between there and Catherton Marshes. Interaction between these two pairs would encourage the Cramer Gutter pair to forage more to the north than in previous years, accounting for some of these observations. In turn, this would probably encourage the pair further north still, from outside the area (see below), to come to the southern edge of their territory to mark it.

Little is known about the outcome of these breeding attempts, as the third survey, designed to see which Curlews have chicks, takes place around a month before any young birds are due to fledge. Breeding success was almost certainly very poor in 2012 and 2013 because of the bad weather during these breeding seasons (April – July), but it is likely to have been better in 2014, because of the warm spring, but perhaps poor again in 2015, because of the cold dry spring. However, six pairs were still active during the third survey, suggesting that they had chicks, but Curlews at Pot House farm “seem to have been quieter this year”, suggesting that these pairs failed.

Curlews are very faithful to their natal areas and subsequent breeding sites, but they do not return in their first year, and breed for the first time when they are two years old. The appearance of a new pair near Catherton Marshes suggests successful breeding in 2013.

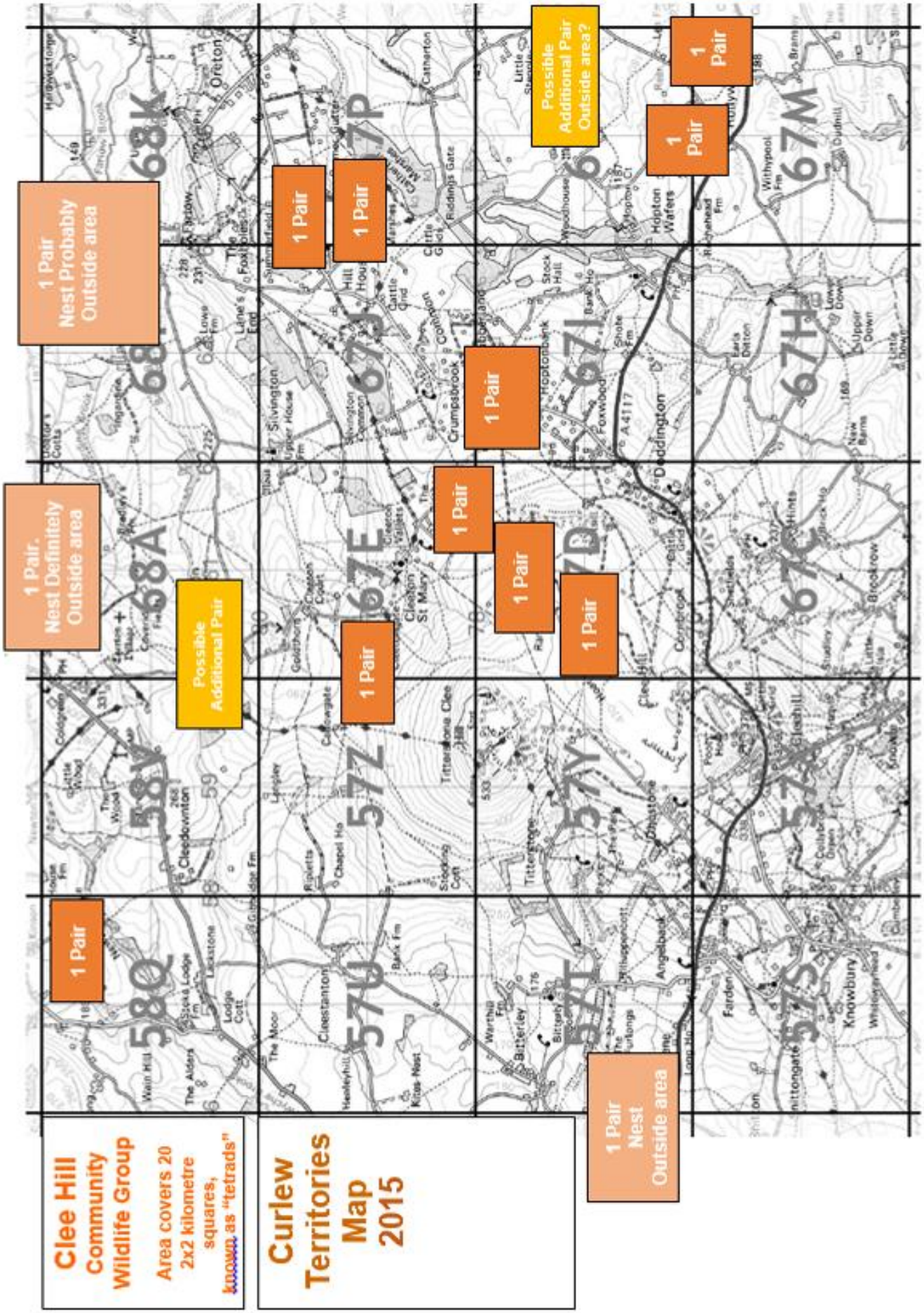
In addition, there are three, possibly four, pairs that nest outside the area, but which forage in it, and one of each of these pairs are sometimes recorded here.

i. A pair nesting just outside the area, north of 68A at a known site in 68B, has been present in all four years.
ii. A single bird recorded in 2015, and in each of the three previous years, in SO57T suggests this is part of an additional territory, probably centred in SO57N.
iii. A pair found in SO68K in 2012 was only seen a bit further north, outside the area, in SO68L, in 2013. They were not recorded in 2014, but a Curlew was seen twice in the vicinity of Farlow in 2015. These observations were attributed in 2012 to “A pair [breeding close to] Stoddeston (in SO68L)” This pair was not included in the population estimate for 2012, or subsequently.
iv. A single Curlew seen near Little Stepple (67N) may have been foraging from a territory to the east, or it may have been foraging from one of the territories near Hollywaste.

From the above observations and analysis, it is estimated that the Curlew population in the area is currently 10 – 11 breeding pairs, with another three (possibly four) pairs again located in adjacent tetrads (SO57N, SO68B and SO68L, and possibly east of 67N).

Previous year’s reports have estimated 11 – 12 breeding pairs in 2014, 12 – 14 in 2013, and 10 – 11 pairs in 2012.

Curlew Territories 2015



The apparent increase between 2012 and 2013 was probably due to improved and increased survey coverage, as more members got to know their squares better. The highest estimate was made in 2013, and the population has probably declined since then, in common with other areas. Two pairs in SO57Y have definitely been lost since survey work started. They occupied the same grass fields for many years, but the fields were grazed in 2014. Another pair in 57U may also have been lost, but this square was not covered in 2015.

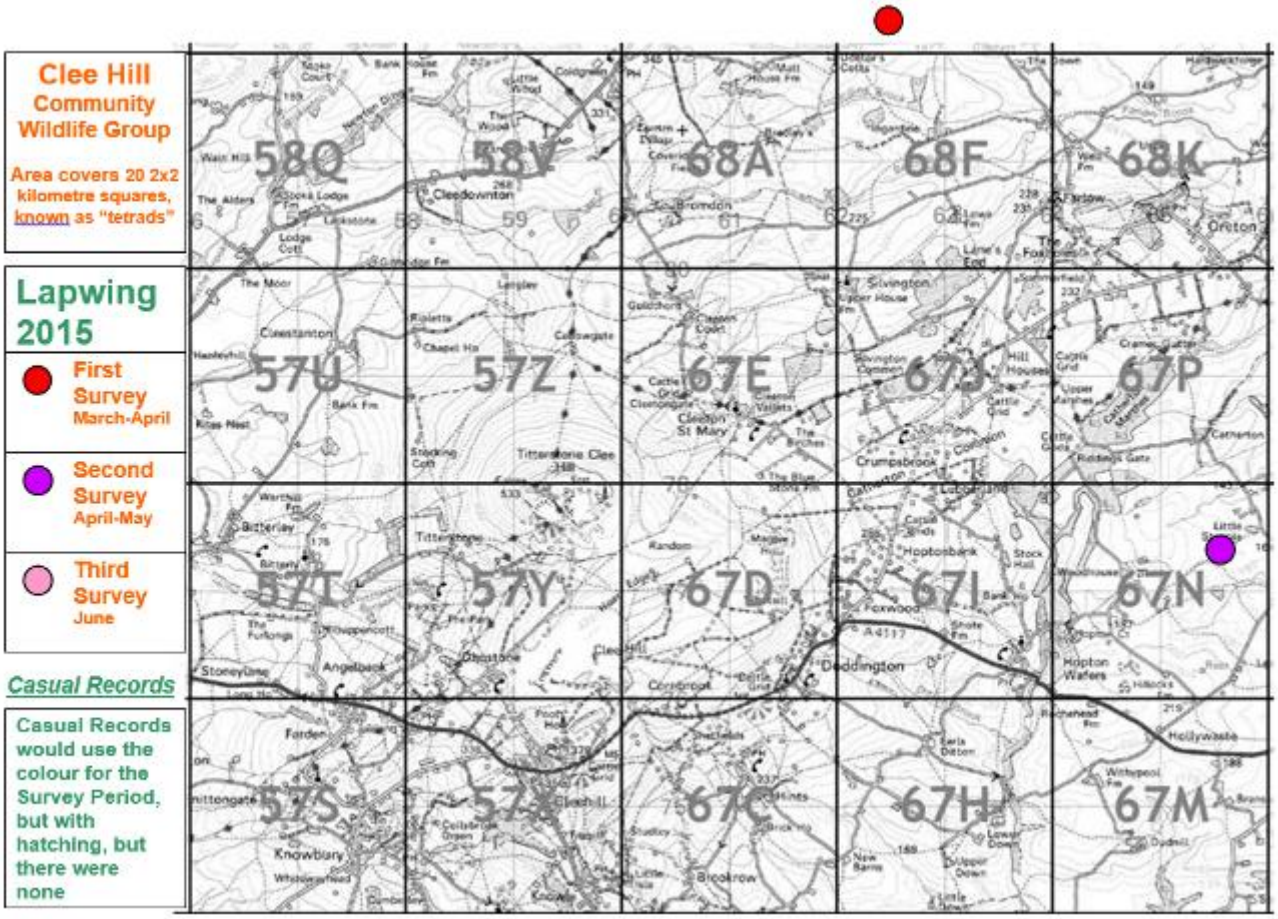
Lapwing

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

There was only one record from within the area, of a single bird on 30 April. It was probably a foraging male, and part of a breeding pair, but there is no evidence to suggest that it nested in the area, and it was probably outside.

Four Lapwings were seen outside the area, north of 68F, on 12 April.

None were found in 67N, where two pairs together were found in 2014, and where a sitting bird was found in 2013.



From the observations and analysis, it is estimated that there were no breeding pairs of Lapwing in the area in 2015 This compares with 2 in 2014, 1 - 2 pairs in 2013, and 3 pairs in 2012.

Pairs found in SO57U and SO68K in 2012 have not been relocated since.

It is likely that there are breeding Lapwing to the east and north of the area.

Anecdotal Evidence for the Decline of Lapwing and Curlew

Members of the Bird Group 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. Lapwings have apparently declined much more than Curlews. Specific examples of anecdotal evidence were collected in 2015: a farmer in 57Z, who hasn't seen either Lapwing or Curlew for many years; a farmer just south of 67H, who hasn't seen either for at least five years, but who said Curlew used to be more common; and a resident in 68A who hasn't seen Curlew "for a very long time". Several other specific anecdotes were quoted in the 2012 and 2013 reports.

Other Target Species

The numbers of the Other Target Species recorded during each of the three survey periods are listed in the Tables in Appendix 5. They are summarised in Table 1.

Table 1. Other Target Species - Summary

Square	Maximum Number of Each Species Recorded														
(Tetrad)	Lapwing	Curlew	Kestrel	Red Kite	Skylark	Meadow Pipit	Cuckoo	Dipper	Dunnock	Wheatear	Stone-chat	Linnet	Bullfinch	Yellow-hammer	Reed Bunting
57S			1			15			9				1		
57T		2					1							1	
57U	(Square not surveyed)														
57X	(Square not surveyed)														
57Y			2	4	11	1	3		1	1	3	1			
57Z		3	2		7										
58Q		2		1	3				2					2	
58V		1			7		1		5					2	
67C						6	3	1	8		2	5	2	3	1
67D		5	3	2	9	54	5			1	2	1	2		1
67E		4	4	1	4	15	2		4	4		6	2	4	3
67H		2							2						
67I		1	3		2	6					4	2			2
67J		3	4	1	5	8	2		2		4	10			8
67M		1	1	1											
67N	1	2													
67P		5	2												
68A					3				3					1	
68F					2				4					8	
68K		2							2				1	1	
TOTALS	1	33	22	10	53	105	17	1	42	6	15	25	8	22	15

Not surprisingly, Barn Owl, Grey Partridge and Yellow Wagtail were not recorded. In addition to the results for 15 species shown in Table 1, Snipe were recorded in 57Y and 67D during the first survey, but they were almost certainly passage migrants, rather than breeding birds. A Swift nest was found in 68A, a Spotted Flycatcher was seen in 67E and a Tree Sparrow in 57Y.

Note that members 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). Numbers of Meadow Pipit, Linnet and Yellowhammer may be exaggerated by the presence of winter flocks moving onto the breeding grounds, before dispersing to the individual breeding sites, during the first two surveys.

The summary table shows the maximum count for each species 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.

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 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, but only a very small proportion will have been recorded.

It will be seen that Skylark, Dunnock and Yellowhammer are widespread and numerous, Meadow Pipit are numerous in restricted parts of the area where suitable habitat still exists (the Commons), and the remaining species that were found are present only in their specific habitats, and in small numbers.

Kestrels are conspicuous, and forage over large areas, so an assessment can be made of their population. The records from 2015 are shown in the map on page 8.

The nest near Pot house Farm in SO67I unfortunately failed, apparently due to stormy wet weather on 2 June (Angela & Kirsty MacKirdy, *pers.comm*.), and the nest in SO57Z was occupied again.

The number and distribution of records was very similar to 2014, apart from a missing pair in 57U, which was not surveyed. The analysis last year suggested perhaps nine pairs, and there appears to be no reason to change that for 2015.

Cuckoo was recorded more this year, in seven squares, than last year (5), with higher maximum counts. They were found in 57T and Y, and 58V, where they were not heard last year. They range far and wide, but they were heard persistently on Magpie Hill and Catherton Common, so there might be more than the estimate of two breeding pairs in 2014, rather than one pair, believed to be the number in 2012 & 2013.

Red Kites were seen in six tetrads, one more than last year, and two more than 2013, including four young birds together on Magpie Hill. There was no evidence of breeding. There was a report of a pair of Kites going in and out of a wood throughout the 2013 breeding season, suggesting an active nest in the area, but it was received too late to check. Such a nest would be the most easterly found in Shropshire since successful breeding recommenced in 2006 following a gap of 130 years. However, the pair did not return to this site in 2014 or 2015.

Active Dipper nests were found in SO67C and 67J, and at several other sites in the area (Jon Lingard, *pers.comm*.).

Decline of Lapwing and Curlew

Lapwing and Curlew are in decline, nationally, here, and elsewhere in Shropshire. Nationally, both have recently been added to the *Red List* of *Birds of Conservation Concern,* Lapwing in 2008 and Curlew in 2015, because of the magnitude of the decline

The decline in the Clee Hill area is shown graphically in Figure 1. This compares the distribution maps representing the results of the current survey in 20 tetrads with the relevant parts of the maps shown in *An Atlas of the Breeding Birds of Shropshire*, based on six years fieldwork 1985-90, and published in 1992. Both maps have been compiled on the same basis and it is likely that more fieldwork has taken place in the current period, so the decline is undoubtedly real.

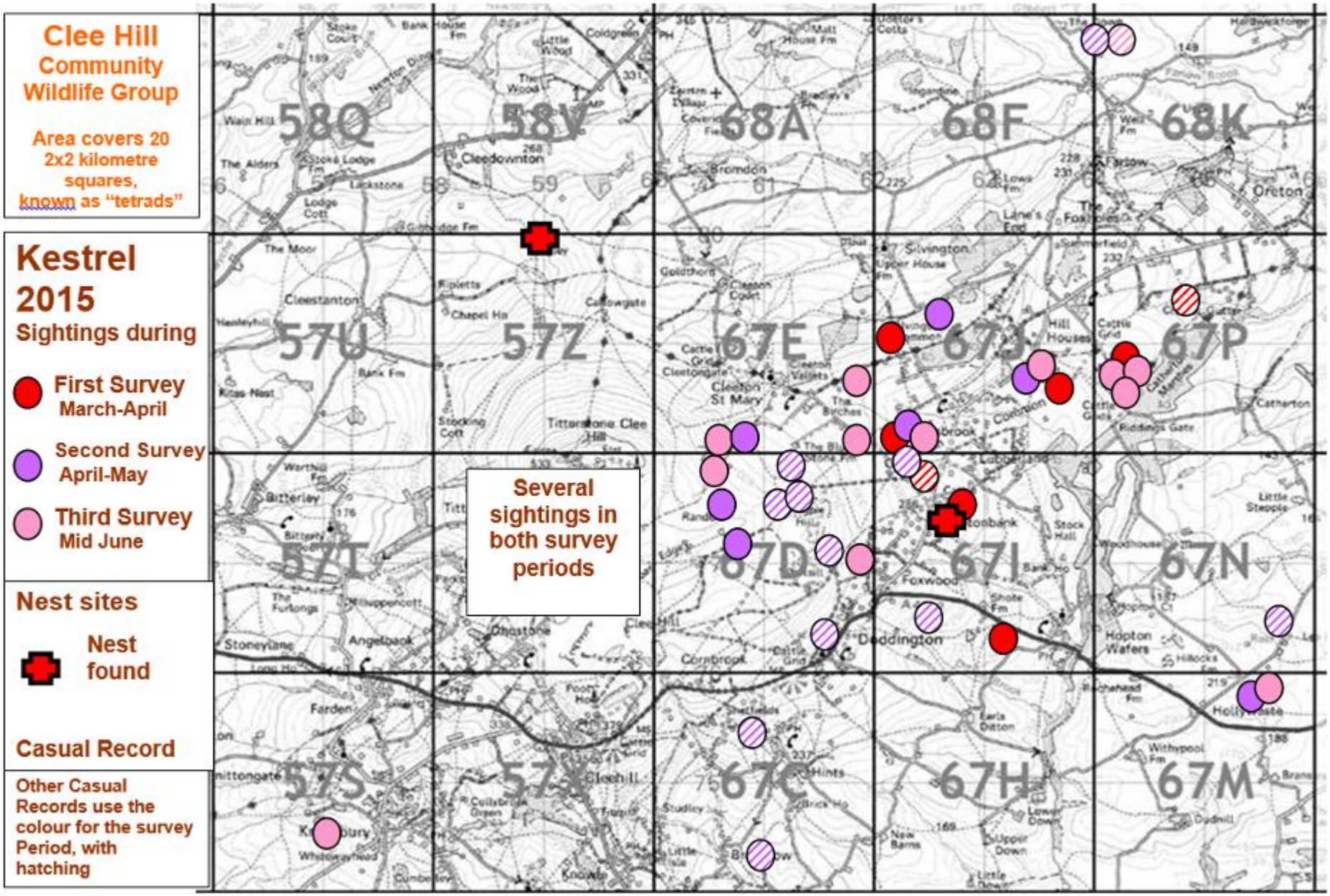
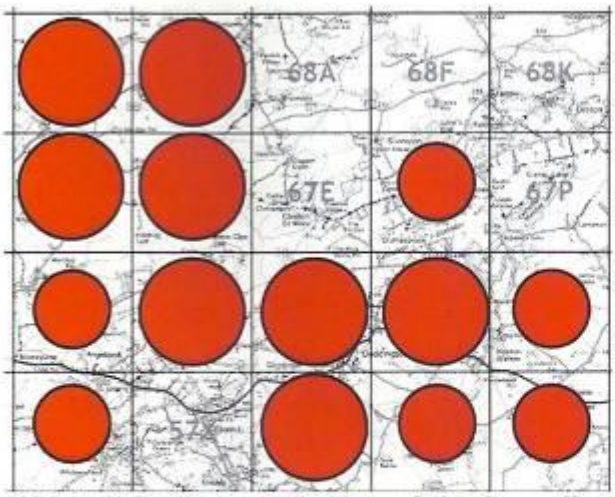
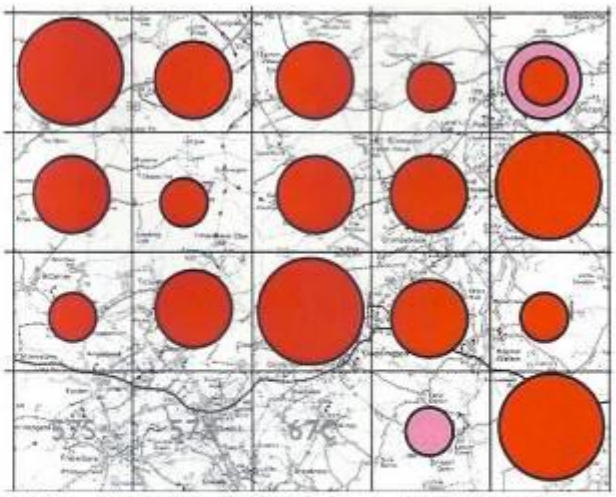

Clee Hill
Community
Wildlife Group
Area covers 20
2x2 kilometre
squares,
known as "tetrads"
Kestrel
2015
Sightings during
First Survey
March-April
Second Survey
April-May
Third Survey
Mid June
Nest sites
Nest
found
Casual Record
Other Casual
Records use the
colour for the survey
Period, with
hatching
Several
sightings in
both survey
periods
58Q
58V
68A
68F
68K
57U
57Z
67E
67J
67P
57T
67D
67I
67N
57S
57X
67C
67H
67M

Figure 1. Distribution of Curlew and Lapwing in the Clee Hill area: Comparison between 1985-90 and 2008 – 13

Curlew

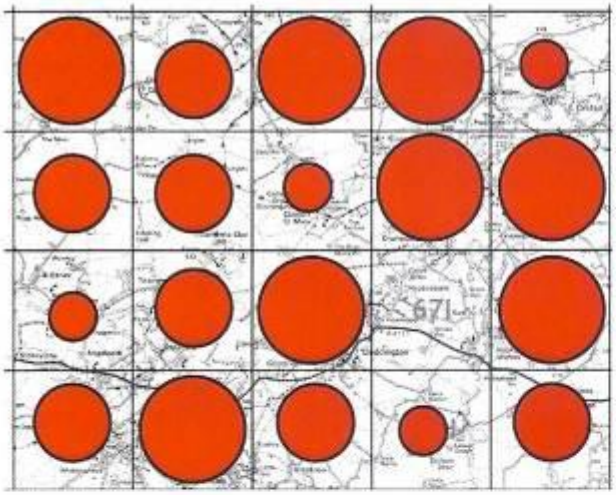


1985 – 90 From *An Atlas of the Breeding Birds of Shropshire* (1992)

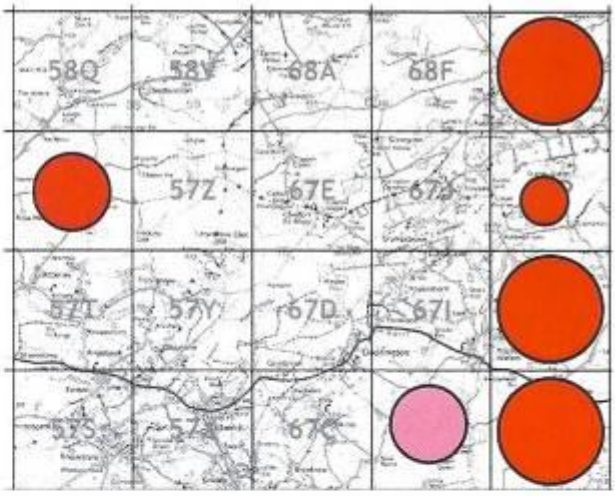


2012 - 14 Clee Hill Community Wildlife Group survey (additional records in Pink from the Shropshire Bird Atlas survey 2008 – 13)

Lapwing



1985 – 90 From *An Atlas of the Breeding Birds of Shropshire* (1992)



2012 – 14 Clee Hill Community Wildlife Group survey (additional records in Pink from the Shropshire Bird Atlas survey 2008 – 13)

Key

The background map is the 20 tetrads (2x2 kilometre squares) surveyed by the Clee Hill Community Wildlife Group each year since 2012

Each dot represents at least one observation during the Atlas period

Large dot = Confirmed Breeding

Middle dot = Probable Breeding

Small dot = Seen or heard in suitable habitat

A large dot indicates that breeding was proved in the tetrad (usually a nest was found, or a bird was seen incubating, or dependent young were seen), a middle size dot indicates probable breeding (usually a pair was seen, or territorial behaviour was observed), and a small dot indicates possible breeding (a bird was seen or heard in the breeding season).

Such an observation needs to occur at least (but perhaps only) once in the whole Atlas / survey period, and it gives no indication of the number of breeding pairs. These distribution maps therefore probably overestimate the population:-

- Lapwings have specific nesting habitat requirements, which in this area usually mean they nest on arable fields planted with spring crops, which get moved each year by crop rotation on farms. Therefore one pair, or a small colony, may breed in several different tetrads over a period of years.
- A pair of Curlews may also move their nest from place to place within their large territories, so again one pair may nest in several tetrads in the Atlas period. Nests are difficult to find, but pairs and territorial display are relatively easy to find, but may be observed anywhere within the large territory, so one pair may be recorded in several tetrads.

Even so, it is clear from the distribution maps in Figure 1 that both species are much less widespread here than they were 20 – 25 years ago.

Action to attempt to reverse these declines is being taken. 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 Environmental Stewardship Higher Level Scheme (part of the system of payments to farmers through the Common Agricultural Policy of the European Union) included provision to reward farmers for sensitive management of habitat on their farms, and providing other environmental benefits. Farmers applying to join the scheme had to take into account the breeding habitat requirements of a number of birds, including Lapwing and Curlew, if they breed on or near the farm, or use land there for feeding. HLS includes specific prescriptions, and payments, for Lapwing and Curlew habitat, if the farmer wants to take them up.

The data provided by Community Wildlife Groups, on the location and habitat of these priority species, helped Natural England (the Government Agency responsible both for achieving the Biodiversity targets, and administering the Environmental Stewardship Scheme) to target its limited resources more effectively to achieve this objective.

At least two farms were able to join HLS as a result of the Group's survey results.

HLS has now come to an end, and has been replaced by a new Scheme, Countryside Stewardship, part of the EU Common Agricultural Policy for 2015 - 22, with similar objectives. However, it is intended to focus the new scheme more, to help achieve the Government's Biodiversity 2020 targets, and overcome the fragmentation of habitats that has led to so much of the decline of wildlife.

The details are still being worked out, but a Targeting Statement and Criteria have been approved. New applications will be invited during 2016. As a direct result of evidence supplied by the Upper Onny Wildlife Group, Curlew has been added to Lapwing as a Target Species for Countryside Stewardship.

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

Use of Clee Hill CWG Survey Results

Most importantly, the Clee Hill CWG 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 operating in the Shropshire Hills, which together now cover well over 500 square kilometres, around two-thirds of the Shropshire Hills AONB. These results help inform the AONB Management Plan, which has recently been revised to cover the five years 2014 – 19.

The records at tetrad level have also been supplied to Shropshire Ornithological Society for incorporation into the Shropshire Bird Atlas. The Atlas project has now completed its six years fieldwork 2008-13, and results should be published in a new county Avifauna, *The Birds of Shropshire*, around the end of 2016.

Comparison of the Atlas maps from the current project with those from the 1985 – 90 Atlas, for the whole of Shropshire, show that Curlew, Lapwing and Kestrel are all declining rapidly. Our survey results show that Curlew and Kestrel are still well established here, and this area is therefore very important to them.

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.

Barn Owl Nest Box Scheme

The Bird Group initiated a Barn Owl nest box scheme in the area in 2013.

Barn Owl is on the *Amber List* of *Birds of Conservation Concern 3 (2009),* because of a long term population decline caused by loss of foraging habitat and nest sites. Provision of nest boxes will help reverse this decline locally. Nest boxes are more likely to be used, and help increase the population, if they are put near to existing Barn Owl territories and foraging areas.
These specially designed nest boxes can be provided free of charge to farmers and landowners with suitable habitat in the Clee Hill area. This requires-

- An isolated farm building, or large isolated tree or pole more than 400 metres from nearest woodland
- Four hectares (10 acres) of permanent rough grassland nearby, several inches tall to provide cover for voles and other prey

A poster advertising the scheme has been put up around the area. Several landowners have responded and potential sites have been assessed by Chris Bargman and Anton Schooley, together with John Lightfoot from the Shropshire Barn Owl Group.

Several boxes have now been installed, like the one at Mahorall Farm pictured, and an indoor box at the same site has been used for roosting. Hopefully one will be used for nesting in 2016.

If you see a Barn Owl, we'd like to know, please

For further information, or to report a Barn Owl sighting in the Clee Hill area, please contact Chris Bargman 01299 270514 helpbarnowls@gmail.com

Bird Walks

Two walks were held, for members and the general public

1. Sunday 19 April, starting at Cleeton St Mary, and visiting the Common up to Magpie Hill. This walk also provided practical training for people who wanted to help with the Bird Survey
2. Sunday 10 May at The Novers woodland, specifically to learn about identifying birds by their song (Joint Meeting with Clee Hill Heritage Trust)

A wide variety of birds were seen, and the walks averaged around 6 participants each.

Acknowledgements

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

Chris Bargman
Hazel Bows
Bob Braddock
Beth & Lionel Bridge
Simon Brown and Shropshire Wild Team
Julie Cooke
Eric Davies
Eric Evans
Ewan & Celia Gibb
Helena and Mike Hale
Peter Johnson
Ian King
Angela, Iain & Kirsty Mackirdy
Chris Neal
Michelle Rocke-Wharin
Peta Sams
Gareth Thomas
Margaret & Graham Thompson
Linda Webb
Marian Wootton

Thanks also to:-

- Andrew Heideman, for putting Bird Group info on the Group's website, and the Facebook page
- Chris Bargman and Anton Schooley, for organising the Barn Owl nest box scheme
- John Lightfoot, of the Shropshire Barn Owl Group, for help and advice
- Jonathon Lingard for additional records and information.
- John Tucker, for leading the Bird Walk at The Novers
- Matt Cotterill of Natural England, who provided the survey maps.

Report

A copy of this report has been supplied to all people who contributed to the surveys, or supplied additional records, and to Natural England.

Copies can be downloaded from the Clee Hill part of the Shropshire Community Wildlife Groups website, www.ShropsCWGs.org.uk

Alternatively, copies are available (electronic .pdf versions or paper copies) from Leo Smith, The Bryn, Castle Hill, All Stretton, Shropshire SY6 6JP. Phone: 01694 720296 email leo@leosmith.org.uk.

Summary 2015

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

Eighteen of the 20 tetrads were surveyed, and we now have an even better understanding of the population and distribution of Lapwing and Curlew, and the status of the Other Target Species. 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 in the area.

Two Bird Walks were held, and the Barn Owl nest box scheme was developed.

Plans for 2016

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

The Barn Owl nest box scheme will be developed, and a programme of local bird walks and other activities will be held.

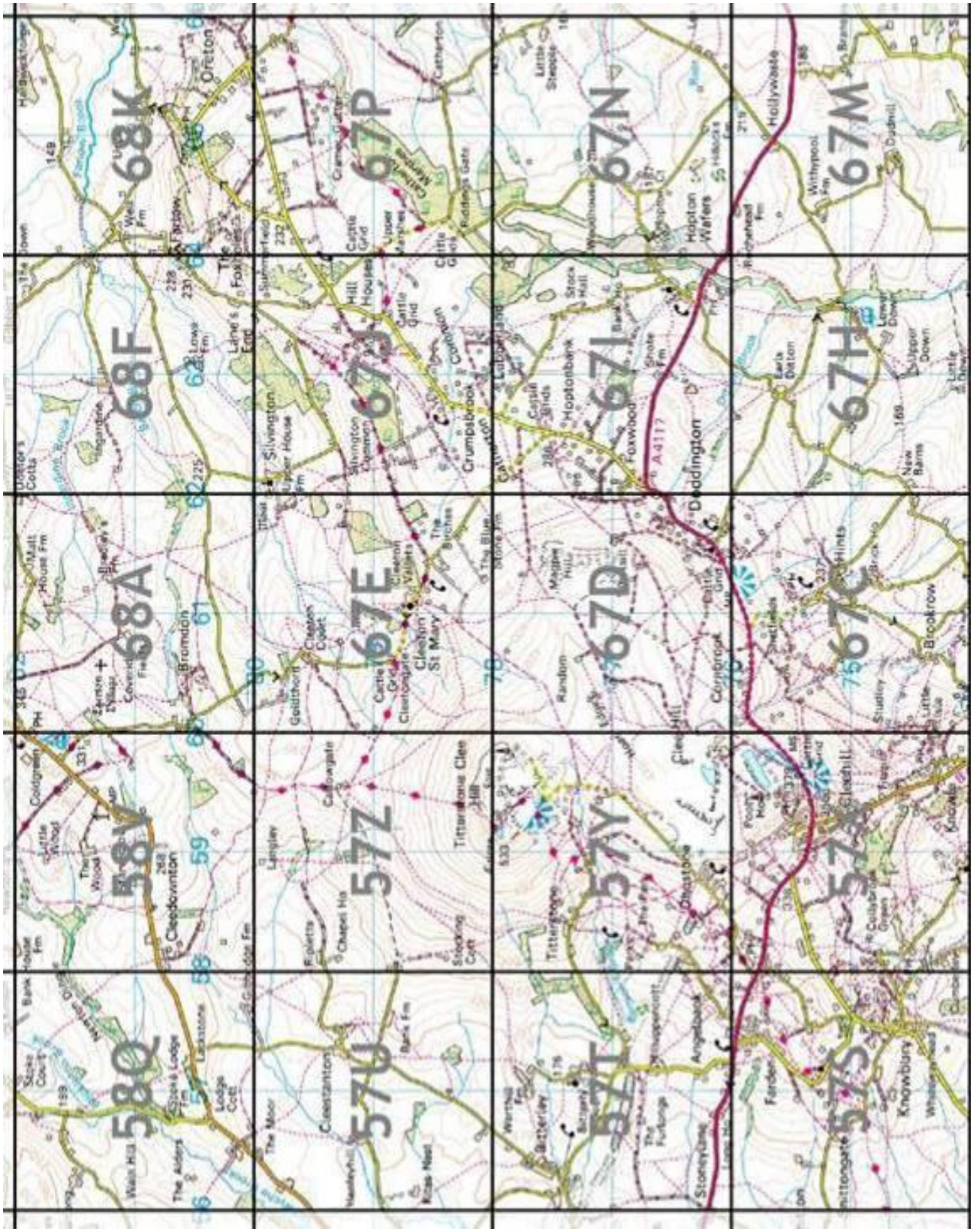
Further consideration will be given to these plans, and any other proposals people want to make, at the Group meeting on Thursday 17 March 2016. This meeting will plan the survey, allocate survey squares to participants, and arrange and publicise the other activities.

Everyone interested in birds is welcome at all meetings and events. A Programme will be published after the meeting. Details can also be found and downloaded from the Clee Hill part of the joint website for all the Community Wildlife Groups in the Shropshire Hills, www.ShropsCWGs.org.uk

Leo Smith
March 2016

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

The prefix SO (defining the 100 km square on the OS National Grid) has been omitted, as this is common to all the squares in the area.



Appendix 2. Bird Survey - Outline Instructions

CLEE HILL COMMUNITY WILDLIFE GROUP

Recording Instructions
Curlews & Lapwings Survey

Objectives

1. To find out where Curlew and Lapwing occur in the breeding season
2. To record behaviour indicative of breeding (e.g. song, display, the making of nest scrapes, alarm calls, chicks)
3. In doing the above, to pin-point areas for a separate and more intensive survey
4. To record, in passing, other easily recognised species of nature conservation importance

Survey Unit

The basic unit is the tetrad, a square made up of four of the one kilometre squares shown clearly on Ordnance Survey maps (with pale blue grid lines). You will be allocated one or more tetrads, and requested to survey it three times – around 1st April, 1st May and mid June.

You are also requested to send in "Casual Records" of Lapwing and Curlew seen in your tetrad(s) outside the periods when the three tetrad surveys are being carried out, and at any time in the rest of the area.

Appropriate Maps will be provided.

Between them, members are surveying up to 20 tetrads which cover the area of the Clee Hill Partnership. A map showing all tetrads in the area, with the Tetrad Reference code, is attached. You don't need to know where this code comes from. However, for those that are interested, it includes a number, which is the number of the 10 kilometre square on the Ordnance Survey national grid, and a letter (A – Z, excluding O), which defines the 25 tetrads in the 10km square, from bottom left to top right. Technically the tetrad reference is preceded by the two letters SO, which is the 100 kilometre square on the Ordnance Survey national grid, but this has been omitted as all squares in the area are SO squares

Survey Periods

There are three recording periods, each of two weeks. The dates vary from year to year, and are printed on the back of the Casual Records map as part of the Recording Instructions. You can do the surveys at any time convenient to you within each two week period, but you will be requested to do it as close as possible to particular dates.

1. The first period (a two week period at the end of March and Beginning of April) 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 1st April), so you will be asked to do the Tetrad survey as close as possible to 1st April
2. The second two week period is at the end of April and beginning of May. This is the best time to find breeding Curlew (first egg date is usually around 30th April), so you will be asked to do the Tetrad survey as close as possible to 1st May.
3. The third period, in the middle of June, 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.

Time of day and duration of survey

You may survey at any time of day. You are requested to spend a minimum of 45 minutes in each one kilometre square of suitable habitat in each of the three Tetrad Survey Periods. So, if the entire tetrad is composed of suitable habitat, you will need to spend a minimum of three

hours surveying in each period, but if there is only one kilometre square of suitable habitat the requirement drops to 45 minutes in each period.

Survey Maps

You are asked to record your observations on a Tetrad map, which will be provided.

However, for the purpose of planning your route, and in particular for determining Public Rights of Way and open Access areas, we strongly suggest you refer to the Ordnance Survey map at the scale 1: 25,000. *Explorer 203, Ludlow*, covers the southern three-quarters of the area. Almost all of the northern quarter is on *Explorer 217, The Long Mynd and Wenlock Edge.* Unfortunately the eastern half of tetrad 68K is on *Explorer 218. Kidderminster & Wyre Forest.*

Preparation

You should do a preliminary recce so as to plan your route with a view to attempting to visit all likely habitat within the tetrad during your survey. It may well be worth scanning the area from high points to pick out what look like good areas. Clearly there are some habitats, notably woodland and villages, which can be missed out. The two main target species are likely to be on relatively flat ground, and associated with grassland but also with any arable that there may be. In particular, areas of damp ground, as indicated on the OS map, should be covered.

Survey Method

You are asked to walk through your Tetrad concentrating on looking for Lapwing and Curlew.

It is important that we all follow the same standard recording technique repeatable for comparative purposes in the future. Therefore please:

1. Mark the route you have followed.
2. Record the amount of time you spend surveying potential habitat. So if, e.g., your route takes you through a forestry plantation, 'stop the clock' and start it again the other side.
3. Enter your observations directly onto the map using the standard symbols shown on the front and back of the recording form.
4. Return your recording forms on the date shown on them to Leo Smith, The Bryn, Castle Hill, All Stretton, Shropshire SY6 6JP

Permissions

You need to cover the ground systematically; so you may need to deviate from public rights of way (or Access Land). You must seek permission before doing so. Be up-front about the survey and the fact that it being done on behalf of a community group. These birds are 'farmers' friends', farmers like to have them around and may well be able to point out where they are, or used to be. We suggest you share your findings with them and make a record of any information they provide on past distribution and numbers.

Safety

If you are surveying on your own, take special care. Ideally you should take a mobile phone with you. Whether or not you have a phone, be sure to advise someone as to where you are going and when you will be back and ask them to raise the alarm should you fail to show up.

Other Target Species

We would also like you record Other Target Species as well, please. The species selected are also listed on the form. They are all quite easy to recognise, and are mostly of nature conservation importance (i.e. they are Target Species for Natural England's Higher Level Scheme, and are on the *Red List* or *Amber List* of *Birds of Conservation Concern).*

However, if there are species here that you are unsure of, don't worry – only record what you are certain of. On the other hand by all means add to this list if you wish.

Further Information: Contact Leo Smith 01694 720296, email leo@leosmith.org.uk

Appendix 3. Bird Survey Instructions on Survey Maps

PLEASE USE THE FOLLOWING SPECIES, ACTIVITY AND HABITAT SYMBOLS TO RECORD BIRDS ON THE MAP

Objectives

1. To help locate Curlew, Lapwing and other species of Conservation Concern in the breeding season
2. To record in particular any behaviour indicative of breeding (e.g. song, display, nests, chicks)
3. In doing the above, to help pin-point search areas for more intensive surveys for Lapwing & Curlew

Recording periods

There are four recording periods. The dates are:-

1. 21st March - 5th April
2. 18th April – 3th May
3. 6th June – 21st June
4. 4th July – 19th July (only if Curlews were recorded during the second or third survey)

1. The first is the best time to find breeding Lapwing (first egg date is usually around 1st April)
2. The second is the best time to find breeding Curlew (first egg date is usually around 30th April), and to locate any Lapwings that have moved to re-lay if the first clutch has failed.
3. The third is timed to find any young Lapwing and Curlew, and most of the other target species

Maps for Recording

Please mark on the map the location of all sightings of the Target Species, using the Species Symbols below. Write the estimated number of each species seen next to its name below.

If you see Lapwing or Curlew in your Squares outside the Survey Periods, or see them anywhere else in the area at any time, please email the details, including Grid Reference, to leo@leosmith.org.uk (or ring 01694 720296)

If you locate any Swift Nest Sites in your Squares outside the Survey Periods, or find them anywhere else in the area at any time, please email the details, including Grid Reference (or preferably building address) to shropshireswifts@gmail.com or phone 01584 876818.

SYMBOLS FOR TARGET SPECIES

CU	Curlew	L.	Lapwing	BO	Barn Owl	S.	Skylark
CK	Cuckoo	DI	Dipper	K.	Kestrel	KT	Red Kite
P.	Grey Partridge	SN	Snipe	SI	Swift (nest sites only)	SF	Spotted Flycatcher
MP	Meadow Pipit	YW	Yellow Wagtail	D.	Dunnock	W.	Wheatear
SC	Stonechat	TS	Tree Sparrow	Li	Linnet	BF	Bullfinch
Y.	Yellowhammer	RB	Reed Bunting				

ACTIVITY SYMBOLS:

Please use the following recording conventions:

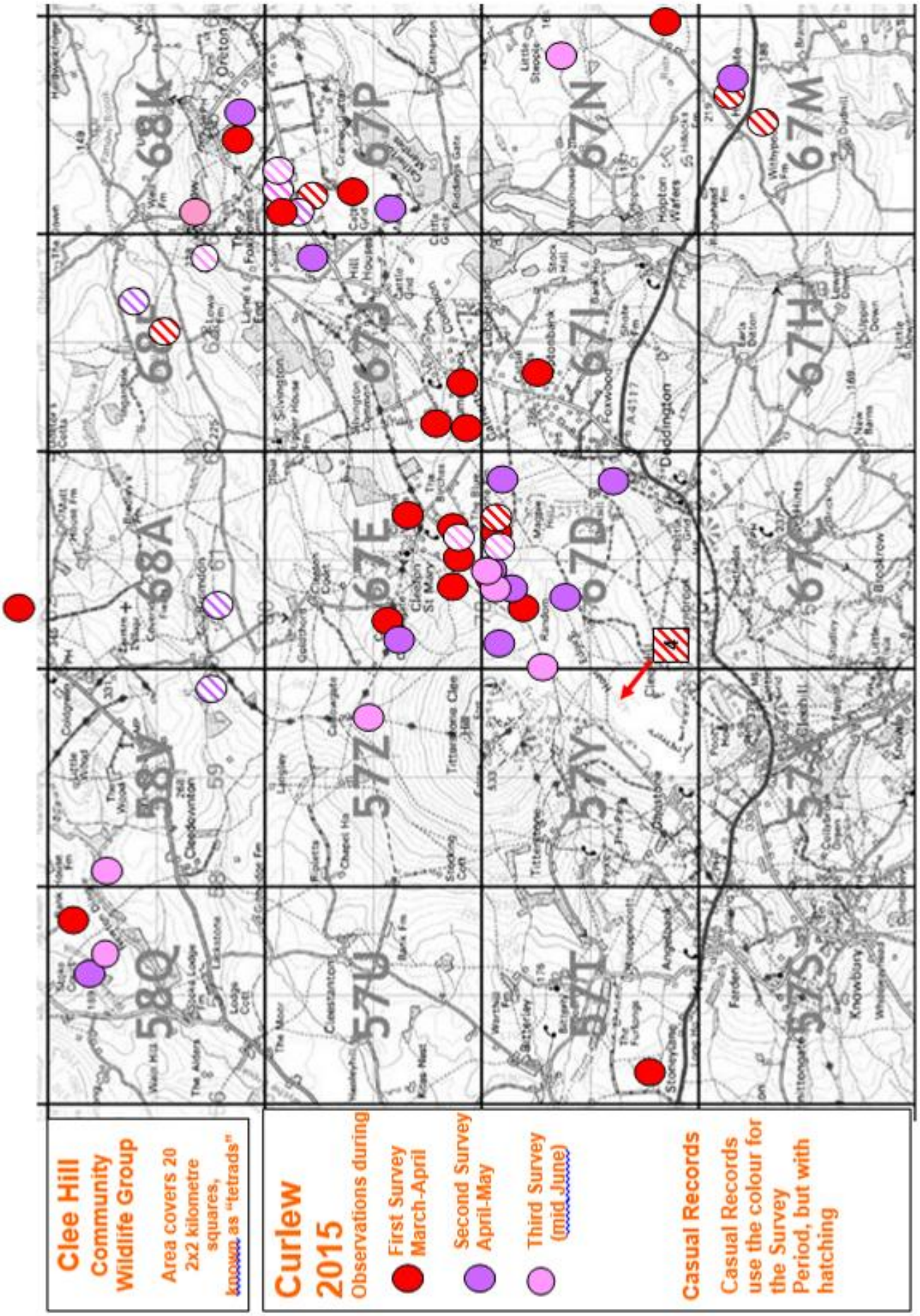
1. We need to distinguish between breeding and other activity. So if, for example, the bird is simply feeding or flying over just enter the species letter e.g. L (or 2L for two Lapwings together)
2. If the bird is singing or displaying, put a circle round the letter e.g. (L)
3. If you happen to notice a bird sitting on a nest, or chance upon a nest with eggs please put an asterisk beside the letter e.g. L*
4. If you notice chicks, enter the date letter plus fam (family) e.g. L fam
5. Show movement of birds, and definitely different birds, using the following symbols:

CU ——— CU	Same Curlew in two different locations – circle if singing/displaying
(CU) - - - - - - (CU)	Definitely two different Curlews in song at same time
CU ——→	Direction of flight – circle if singing/displaying

Please return the completed survey Maps as soon as possible after the end of each Recording Period, to **Leo Smith, The Bryn, Castle Hill, All Stretton SY6 6JP**

Please summarise the number of different Curlews (pairs and individuals) recorded overleaf. Also, if you see any other wildlife of interest, mark it on the map, and record the details here:-

Appendix 4. All Curlew Observations 2015



Appendix 5. Bird Survey – Results from each of the Three Survey Periods

Clee Hill Community Wildlife Group
Lapwing, Curlew and Other Birds Survey 2015

First Period Survey: 22nd March – 6th April (approx)

Square	Surveyor		Number of Each Species Recorded																			
(Tetrad)	First Name	Surname	Lapwing	Curlew	Kestrel	Red Kite	Grey Partridge	Snipe	Skylark	Meadow Pipit	Cuckoo	Dipper	Swift (sites)	Dunnock	Wheatear	Stone-chat	Spotted Flycatcher	TS	Linnet	Bullfinch	Yellow-hammer	Reed Bunting
57S	Beth & Lionel	Bridge								15				9						1		
57T	Linda	Webb		2							1										1	
57Y	Chris	Neal			2	4		3	1	1				1	1	1		1	1			
57Y	Bob	Braddock			1				5							1						
57Z	Margaret & Graham	Thompson							2													
58Q	Peta	Sams		1					3					2							2	
58V	Peta	Sams							7					5								
67C	Beth & Lionel	Bridge								6				8						2	3	
67D	Ian	King		4				1	2	54												
67D	Ewan & Celia	Gibb		2	3	2			1	1						1						1
67E	Eric	Davies		3		1			2	4				1								2
67E	Julie	Cooke		4					3	15				2								3
67E	Simon	Brown / SWT		2																	2	
67H	Kirsty & Angela	Mackirdy		2										2								
67I	Kirsty & Angela	Mackirdy		1	3				1	5												
67J	Hazel	Bows		3	4				5	6				2		4			1			
67J	Eric	Davies		2						4									1			1
67M	Peter	Johnson				1																
67N	Peter	Johnson		2																		
67P	Chris	Bargman		2	1																	
67P	Helena and Mike	Hale		1																		
68A	Gareth	Thomas							2					2					`1			
68A	Simon	Brown / SWT	(No target species recorded)																			
68F	Marian	Wootton												4							8	
68K	Eric	Evans		2										2							1	
TOTALS			0	33	14	8	0	4	34	111	1	0	0	40	1	7	0	1	3	3	17	7

3RZ 57Y

Second Period Survey: 19th April - 4th May (approx)

Square	Surveyor		Number of Each Species Recorded																			
(Tetrad)	First Name	Surname	Lapwing	Curlew	Kestrel	Red Kite	Grey Partridge	Snipe	Skylark	Meadow Pipit	Cuckoo	Dipper	Swift (sites)	Dunnock	Wheatear	Stone-chat	Spotted Flycatcher		Linnet	Bullfinch	Yellow-hammer	Reed Bunting
57S	Beth & Lionel	Bridge												8								
57S	Linda	Webb																				
57Y	Chris	Neal																				
57Y	Bob	Braddock							8		3					3						
57Z	Margaret & Graham	Thompson			2				7													
58Q	Peta	Sams		2																		
58V	Peta	Sams							1												2	
67C	Beth & Lionel	Bridge								3				4		2			5	2		
67D	Ian	King		1					8	25	2											
67D	Ewan & Celia	Gibb		5	3	2			9	7	1				1	2			1			1
67E	Eric	Davies		2	1				1	3	1								6		4	2
67E	Julie	Cooke			3	1			4	2				3	4						2	1
67E	Simon	Brown / SWT	(No target species recorded)																			
67H	Kirsty & Angela	Mackirdy																				
67I	Angela & Iain	Mackirdy			1				2	5						4						2
67J	Hazel	Bows			2	1			2	8	2			1					10			
67J	Eric	Davies			1				1	2	1			2		2			2			1
67M	Peter	Johnson		1	1																	
67N	Peter	Johnson	1																			
67P	Chris	Bargman		5	2																	
67P	Helena and Mike	Hale		2																		
68A	Gareth	Thomas							3					3							1	
68A	Simon	Brown / SWT	(No target species recorded)																			
68A	Michelle	Rocke-Wharin							1													
68F	Marian	Wootton							2					1							1	
68F	Michelle	Rocke-Wharin							1		1											
68K	Eric	Evans		2										1						1	1	
TOTALS			1	20	16	4	0	0	50	55	11	0	0	23	5	13	0	0	24	3	11	7

Target Species not found in first two surveys: Barn Owl Yellow Wagtail Wheatear Swift Tree Sparrow

Lapwing, Curlew and Other Birds Survey (Continued)

Third Period Survey: 6th - 21st June (approx)

Square			Number of Each Species Recorded																	
(Tetrad)	First Name	Surname	Lapwing	Curlew	Kestrel	Red Kite	Snipe	Skylark	Meadow Pipit	Cuckoo	Dipper	Swift (sites)	Dunnock	Wheatear	Stone-chat	Spotted Flycatcher		Linnet	Bullfinch	Yellow-hammer	Reed Bunting
57S	Beth & Lionel	Bridge			1								2								
57S	Linda	Webb	(No target species recorded)																		
57Y	Chris	Neal																			
57Y	Bob	Braddock						11							3						
57Z	Margaret & Graham	Thompson		3	2			2													
58Q	Peta	Sams		1		1															
58V	Peta	Sams		1				1		1										1	
67C	Beth & Lionel	Bridge							6	3	1		3		1			2		2	1
67D	Ian	King		2	1				10	3											
67D	Ewan & Celia	Gibb		3	1					5									2		
67E	Eric	Davies				1		1	4				2					2			2
67E	Julie	Cooke			4			4	5	2			4			1		1	2	3	1
67E	Simon	Brown / SWT		2																	
67H	Kirsty & Angela	Mackirdy																			
67I	Angela & Iain	Mackirdy						1	6									2			
67J	Hazel	Bows			3				3						2						8
67J	Eric	Davies																			
67M	Peter	Johnson			1																
67N	Peter	Johnson		2																	
67P	Chris	Bargman		2	1																
67P	Helena and Mike	Hale																			
68A	Gareth	Thomas						1				1	3							1	
68A	Simon	Brown / SWT																			
68A	Michelle	Rocke-Wharin																			
68F	Marian	Wootton						1												1	
68F	Michelle	Rocke-Wharin																			
68K	Eric	Evans		2																	
TOTALS			0	18	14	2	0	22	34	14	1	1	14	0	6	1	0	7	4	8	12

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