

Rea Valley Community Wildlife Group

Celebrating wildlife in Pontesbury, Minsterley,
Stiperstones and the Hope Valley area



Annual Report 2016-17



Stiperstones &
Corndon Hill Country
LANDSCAPE PARTNERSHIP SCHEME



Contents

1. An introduction to Community Wildlife Groups (CWGs) in the Landscape Partnership Scheme area	1
2. Plant Group report	2
2.1 Verge Surveys	3
2.2 Recording for the Shropshire Wildlife Trust	3
3 Curlews, Lapwings and Other Birds Survey.....	4
3.1 Objectives	4
3.2 Methodology	4
3.3 Curlew.....	5
3.4 Lapwing	6
3.5 Anecdotal Evidence for the Decline of Lapwing and Curlew.....	6
3.6 Other Target Species.....	7
3.7 Barn Owl Project.....	8
3.8 Nest Box Scheme	8
3.9 Lapwing and Curlew in the LPS area.....	8
3.10 Links with the LPS Curlew Country Nest Monitoring work	8
3.11 Decline of Lapwing and Curlew	9
3.12 Use of CWG Survey Results.....	10
3.13 Recommendations.....	10
3.14 Acknowledgements.....	11
3.15 Summary 2016.....	11
3.16 Plans for 2017.....	11
4 Curlew Country Report for Community Wildlife Groups	16
4.1 Nest Monitoring and Intervention	16
4.2 Arts Activities	17
4.3 National 'lowland' curlew picture	17
4.4 2017/18 plans	17
4.5 Beyond the LPS.....	18
4.6 Nest Monitoring - Summary of year 2 (2016 findings).....	18
5 Rescuing Rocks & Overgrown Relics Moth Events 2016.....	19
5.1 Aims.....	19
5.2 Summary of 2015 moth workshops.....	19
5.3 Definitions	19
5.4 Methods	20
5.5 Results.....	20
5.6 Nationally Notable species.....	21
5.7 Other species of note.....	21
5.8 Project publicity.....	22
5.9 Conclusions	22
5.10 Acknowledgements.....	23
5.11 References	23
6 Resting Hill Nestbox Scheme 2016.....	24
6.1 Summary Headlines.....	24
6.2 Results.....	24
6.3 Nest Success Rates.....	25
6.4 Distribution of Nests.....	26
6.5 School Visits	27
6.6 Future Work and Maintenance.....	27

1. An introduction to Community Wildlife Groups (CWGs) in the Landscape Partnership Scheme area

The Stiperstones and Corndon Hill Country is a beautiful upland area that crosses the Welsh English border between the Shropshire Hills and Montgomeryshire. The *Stiperstones & Corndon Hill Country Landscape Partnership Scheme* (LPS) is a five year programme of work (ending in March 2018) to raise awareness of, enhance and celebrate local history and wildlife. Funded by the Heritage Lottery Fund, the Scheme brings together local people, groups, organisations and professionals from England and Wales, and covers an area bounded by the settlements of Churchstoke, Chirbury, Minsterley, Pontesbury, Bridges, Wentnor and Norbury. Further information on the LPS is available through the website: <http://www.stiperstonesandcorndon.co.uk/>



The 199km² Scheme area is bounded by the parallel ridges of the Long Mynd and the Stiperstones with the prominent Corndon Hill to the South West

The public consultation carried out during the development phase of the LPS highlighted the commitment of local people to wildlife conservation. Subsequently, in 2013, when the Scheme was launched, this gave rise to the development of two, new local Community Wildlife Groups - one group was formed in the Rea Brook catchment and the other in the Camlad river catchment (for information on the other CWGs in South Shropshire, please visit: <http://www.shropscwgs.org.uk/>).

Now in its fourth year, the Rea Valley Community Wildlife Group continues to take action to conserve key species in the LPS area, through ongoing monitoring and surveys. Surveys, such as those of the iconic Curlew, are crucial to our understanding of population trends and provide baseline data which informs intervention attempts to reverse local declines. The data is now feeding-in to the national lowland picture.



Moth surveying at The Bog Mine site

Following the example of other CWGs in Shropshire, the Rea Valley group is given a voice in order to develop interest in other wildlife, and as with Curlews, these too have helped to establish the status of key wildlife species and their habitats. Projects, such as *Rescuing Rocks and Overgrown Relics* and *Wildflower Meadows and Verges*, continue to inform future management of sites, whereas nest box schemes and the involvement of Young Rangers and *Shropshire Wild Teams* ensures that the project engages local people - experts, enthusiasts and amateurs alike.

As the LPS enters its final year there is a growing emphasis on project legacy and supporting the groups' moves towards greater independence. With this in mind, a questionnaire has been designed to evaluate the LPS CWG project since it began; to gather members views on the Group, post-LPS funding, and to elicit ideas on possible future direction.

Please follow this link to the questionnaire: <https://www.surveymonkey.co.uk/r/HWKXNBV> . Your thoughts and comments are most valuable and your support, as always, is most appreciated.

2. Plant Group report

From the initial meetings of the Corndon Stiperstones Landscape Partnership Project a number of people had expressed interest in forming a plant group.

In 2016 we continued to run the outings of the three CWG plant groups together. Of these 4 were the geographical RV CWG area [Shown in blue]

March 13th we met at the Gleanings for a social event to discuss the last year's survey work and the upcoming 2016 surveys. 20 people were present.

April 7th Lichens training day. We were very lucky to get Bob Kemp to give us a very clear and instructive introduction to this group. It took the form of a PowerPoint presentation followed by looking at lichens around the Bog area and then back to the Natural England offices for more tuition.

12 present

April 10th Ancient trees. Visit to an area of old wood pasture near Lydham to see and measure and record some of the old oak pollards which had been hidden in an area of conifers for fifty years. This is a unusual habitat for this area.

April 29th. Our third well attended meeting lead by Dan Wrench teaching the basics of mosses and liverworts [bryophytes]. After identifying and collecting specimens around the Bog we headed back to NE offices for lunch and spent time keying out the various specimens using lenses and microscopes.

14 present

May 2th Minsterley meadows SSSI It was a real treat to visit these traditionally managed species rich hay meadows, important particularly for their large numbers of Green Winged orchids. 12 present



June 16th Hope Common. This varied habitat of grazed meadows, old coppice oak woodland and stream always comes up with a rich species count. There is a good stand of Wood horsetail.

7 present

July 5th White Grit Meadows. Two adjacent SSSI's. The first, a species rich hay meadow is particularly special for its abundance of Greater Burnet.

The second nearby SSSI site is a series of species rich meadows managed by grazing with an abundance of Dyers Greenweed. We also visited a new species rich hay meadow nearby with Southern marsh orchid. 12 present

July 7th Hogstow hayfields. We were shown around these species rich meadows by the owner. It is always fascinating to hear about the history of a meadow and how it has changed. 8 present.

July 17th Stapeley Common is a large and varied area with some particularly good wet flushes, so attention was given to rushes and sedges. 7 present

Aug 4th Corndon Hill. Again we were looking at the wet flushes around the base of the hill. We found some good areas of marsh violet and the small carnivorous plant sundew. Also a bright yellow green fungi which was later identified as Citrine waxcap [Hygrocybe citrovirens]

Corndon hill is an SSSI. It is composed of a base rich volcanic rock which give rise to a particular flora including some unusual ferns. We saw Parsley fern, common in western mountains but at its eastern range here. 4 present

October 18th. Fungi Foray at the Bog led by Jo Weightman. We were also joined by other members of Shropshire fungi group. Considering how dry the weather had been it was very good good count with a total of 59 species recorded.

In the afternoon we looked at the Natural England SSSI hay meadows at Pennerley and recorded 24 species including 8 waxcaps.

Some rare and unusual species were recorded at both places. 11 present



2.1 Verge Surveys

On April 8th we met for an afternoon road verges survey training session at the Gleanings to which 8 people came

Carrying on from 2015 we modified and simplified the verges survey form which should provide all the relevant data. Volunteers were again provided with these and a tetrad map [4 square kilometres]

The majority of the tetrads have now been surveyed and we will aim to finish these in 2017. 20 people have taken part We have surveyed approximately 150 kilometres of road verges in the Upper Onny WG area, [100 km in the Rea valley WG](#) area and 50 km in the Camlad valley WG area.

This information is now going onto the Shropshire Council GIS data base.

If we can find the remaining species rich verges we can feed this information to Shropshire Council who, hopefully with the help of local Parish Councils [some of whom have already expressed interest] will manage these verges in a more sympathetic way.

We will continue looking for unimproved meadows in 2017

2.2 Recording for the Shropshire Wildlife Trust

In addition to the above outings the Shropshire Wildlife Trust arranged for the group to monitor 9 Wildlife Sites and 4 potential Wildlife Sites.

All these sites were surveyed and

1. The different habitats mapped (with reference to plant communities where possible)
 - The condition of each habitat assessed
 - A full plant list produced
 - Other species of interest noted
 - Photographic record made
 - We visited wetland, grassland and woodland sites and mostly they were in good condition.

Many thanks to everybody that came on the outings and especially those who contributed as surveyors, tutors, owners and managers of the sites we visited.

Rob Rowe
February 2017

3 Curlews, Lapwings and Other Birds Survey

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

This was the third year in which a bird survey was carried out in this part of the Landscape Partnership Scheme (LPS) area. It complements surveys carried out by the Upper Onny Wildlife Group since 2004, and 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.

3.2 Methodology

The part of the LPS area covered by this Community Wildlife Group (RVCWG) has been divided up into 26 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 on page 12.

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 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.

The methodology was identical to that used in 2014 and 2015

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. A fieldwork training session was provided on 28 March for people that wanted it. Most had helped with the 2014 or 2015 survey, and so felt that a feedback meeting to discuss the results of the first two surveys, and provide clarification where necessary, was not needed. A progress report with a Curlew map showing the results of the first two surveys was emailed out to participants on 11 May (it was noted that the Lapwing distribution was similar to that found in 2015), prior to the start of the third survey.

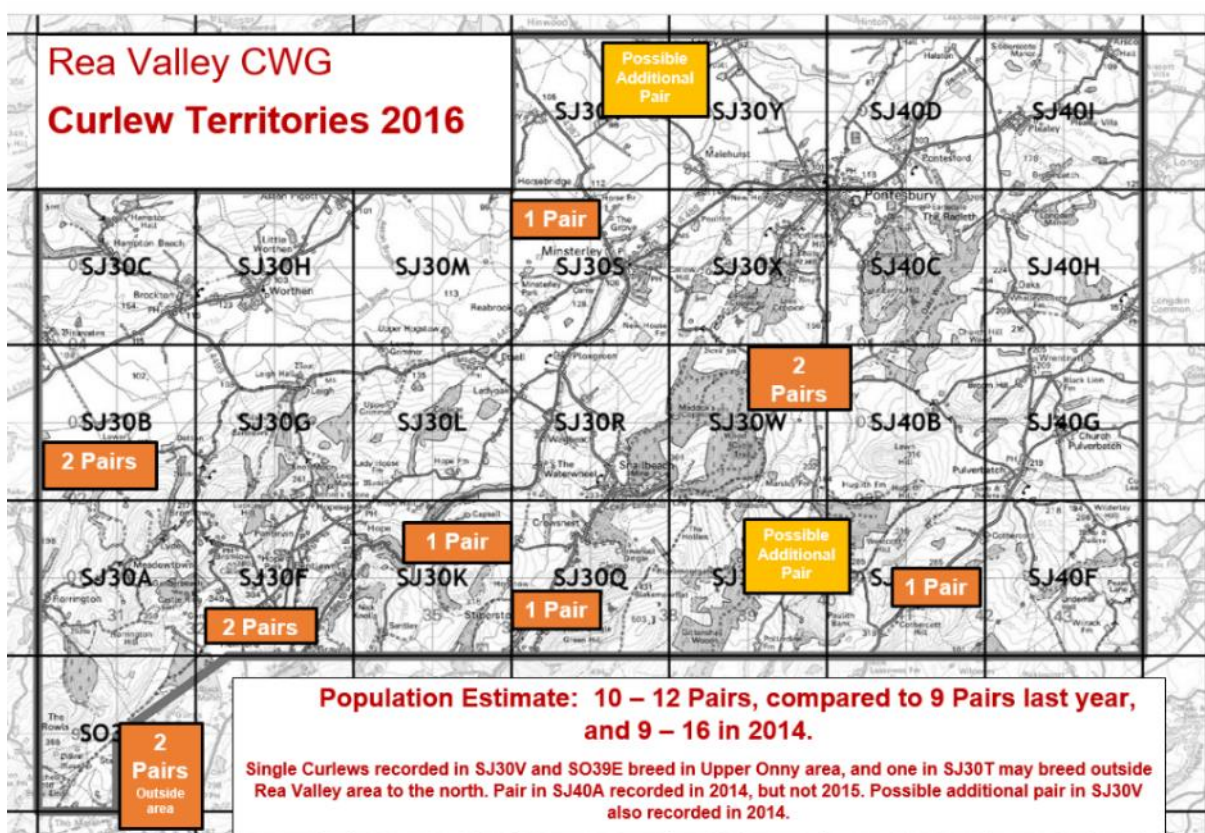
Survey work was carried out in all except five of the 26 tetrads, and members spent almost 250 hours on it. This represents an excellent effort, almost as good as 2014, when all except one tetrad was covered, and better than 2015, when five tetrads weren't covered and the total time spent was 210 hours.

3.3 Curlew

The map summarises the estimated number and distribution of Curlew territories in the area. The location of Curlews found during the surveys, or reported on Casual Record maps, is shown on the map on page 13.

The methodology requires observations of a pair together, or a territorial display, 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, so 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, in this case 10 pairs, with possible additional pairs noted separately.

Results from previous years have been consolidated, as two pairs were again found in SJ30B (near Binweston), and in SJ30W / SJ40B (around Habberley), compared with the estimated 1-2 pairs at each location in 2014, and the pair at Upper Cothecott, which was found in 2014 but not 2015 was also relocated. However the pair found in SJ30H (near



Worthen) in 2015 was not relocated, and the farmer reported that Curlews came to feed there, but not breed

Two pairs again returned to SJ30F (Hemford) – the loss of a breeding pair since 2014. Also, there was no evidence for more than one pair in SJ30K (Santley), compared to an estimate of 2 – 3, possibly 4, pairs in 2014. None were found in any of the other three areas where there were “Possible Additional Pairs” in 2014. The single birds seen then in these three areas were therefore probably foraging away from their nest sites.

There is no evidence that any young Curlews fledged in the area.

Not surprisingly, it takes a few years to build up a complete picture of the Curlews in the area, but that has now largely been achieved. The survey in 2017 should help consolidate the picture.

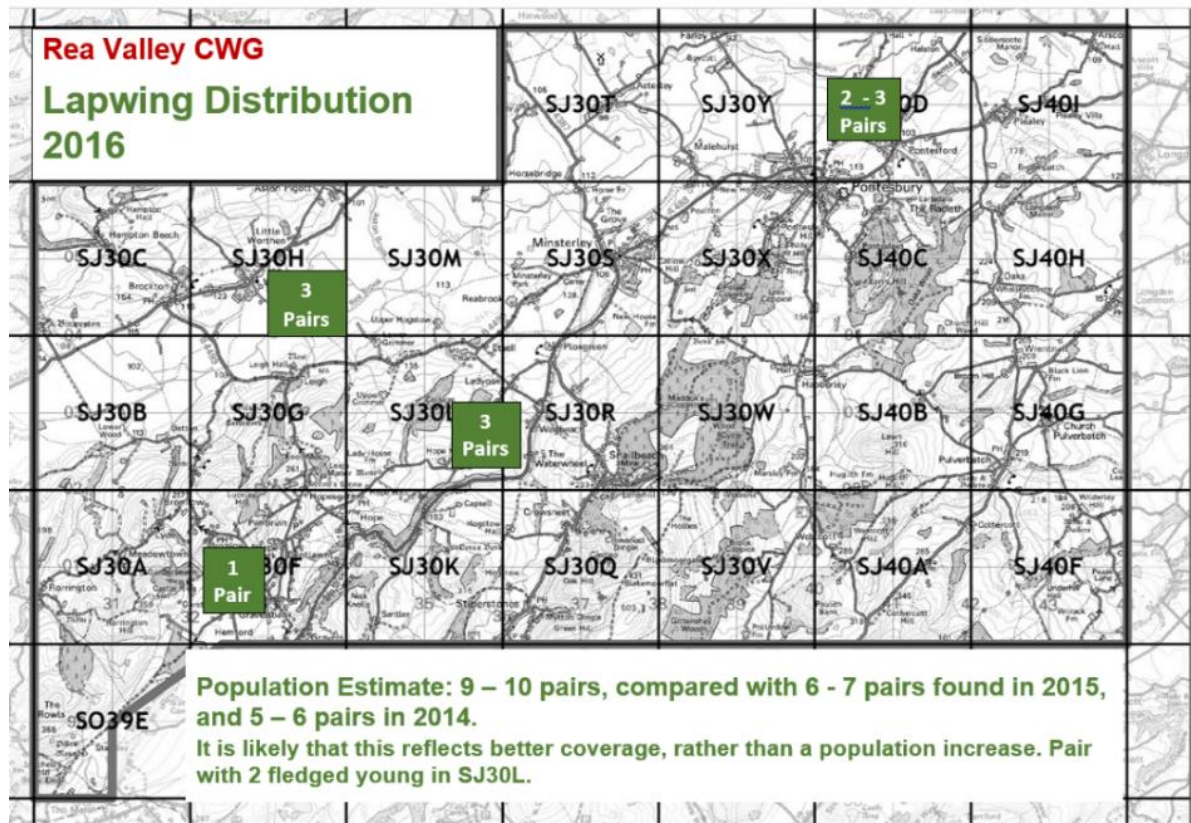
Over 60 Curlews have been colour-ringed at the Dolydd Hafren Montgomery Wildlife Trust Reserve on the River Severn near Welshpool in March, in either 2015 or 2016, and two were found breeding in the area, both near Hemford.

From the observations and analysis, it is estimated that the Curlew population in the area in 2016 was 10 – 12 breeding pairs, compared to 9 pairs in 2015, at the bottom end of the estimate of 9 – 16 pairs in 2014.

The 2014 - 16 surveys were the start of regular annual monitoring to establish the number of pairs actually present, better knowledge of nesting and foraging areas, and the population trend. It will be repeated in future years.

3.4 Lapwing

The map summarises the estimated number and distribution of Lapwings. It shows the cumulative results of all three Surveys.



Lapwings need short vegetation or bare ground to nest on, and those that nest on arable land have to move round to follow the farm crop rotation. Breeding sites in SJ30H and SJ30L were again occupied, and the nest site north of Minsterley was located this year. The single nest near Bromlow Callow was reported, rather than found by the Group. Again, a picture of breeding sites in the area is being built up, and the apparent increase in population, year on year, is likely to be due to better coverage, rather than an increase in Lapwings.

From the observations and analysis, it is estimated that the Lapwing population in the area in 2016 is 9 – 10 breeding pairs, compared with 6 – 7 pairs found last year and 5 – 6 in 2014.

3.5 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 Curlews are less common now than they used to be. Lapwings have apparently declined much more than Curlews.

3.6 Other Target Species

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

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 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.

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, and perhaps their habitat preferences, but only a very small proportion will have been recorded.

Table 1. Other Target Species - Summary

Tetrad	Maximum Number of Each Species Recorded (Individual Birds)												
	Lapwing	Curlew	Kestrel	Red Kite	Skylark	Meadow Pipit	Cuckoo	Dunnock	Wheat-ear	Stone-chat	Linnet	Bullfinch	Yellow-hammer
SJ30 A	(Square not surveyed)												
SJ30 B		3											
SJ30 C	(Square not surveyed)												
SJ30 F		4											
SJ30 G	(Square not surveyed)												
SJ30 H	6	1											
SJ30 K		2						2				1	
SJ30 L	6												
SJ30 M		1			7								
SJ30 Q			2	2	11	65	3	2		5	3	1	
SJ30 R	(Square not surveyed)												
SJ30 S	1			1	9			3					
SJ30 T		1			2			4					1
SJ30 V		2	1		7						1	1	
SJ30 W		2											
SJ30 X		2		1									
SJ30 Y	(No target species recorded)												
SJ40 A		1	1	2	1	1			1	1			
SJ40 B		3		1					1				1
SJ40 C	(Square not surveyed)												
SJ40 D	4				2								
SJ40 F			1		6	2				2	4		3
SJ40 G	(No target species recorded)												
SJ40 H					2			4					
SJ40 I	(No target species recorded)												
SO39 E		3	1		3								
Totals	17	25	6	7	50	68	3	18	2	8	8	3	5
Of the Target Species, Barn Owl, Grey Partridge, Snipe, Dipper, Swift (nest sites), Tree Sparrow and Reed Bunting were not recorded on any survey.													

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 uplands, particularly The Stiperstones), and the remaining species that were found are present only in their specific habitats, and in small numbers.

Cuckoo became a Red List species in the Birds of Conservation Concern 3: 2009. It was recorded in one tetrad, compared with two last year.

Red Kites were seen in five tetrads, reflecting the spread of this species, but there was no evidence of breeding. A pair did nest in the area in 2012, and, given the rapid spread and population increase (Over 30 pairs in Shropshire now – the first successful breeding for 130 years occurred as recently as 2006), it is likely that breeding will become a regular occurrence in the near future.

There was one casual record of Dipper (SJ40C), and of Swifts breeding in Minsterley.

Not surprisingly, six of the more scarce Target Species were not recorded at all during the surveys – Barn Owl, Grey Partridge, Snipe, Dipper, Swift (nest sites), Tree Sparrow and Reed Bunting

3.7 Barn Owl Project

The Group initiated a Barn Owl project. Nest boxes are only worth putting up in areas of good foraging habitat (rank vegetation a few inches high, where the favoured prey, voles, can be found) so a poster asking people to report sightings has been widely distributed in the area.

No reports were received in 2016. Previously, three reports have been received (near Pontesbury, Plealey and Hemford, not enough to identify potential sites for nest boxes yet.

The poster is attached as page 15. Reports of sightings are still wanted, please.

3.8 Nest Box Scheme

A nest box scheme for woodland birds, particularly Pied Flycatcher, in the Stiperstones valleys has been developed by the LPS and Natural England. A report of a successful first year is given on page 24.

3.9 Lapwing and Curlew in the LPS area

The total number of Lapwing and Curlew found by the three Community Wildlife Groups in the LPS area in 2016 is shown in Table 2.

Table 2. Lapwing and Curlew in the LPS area 2016
(Estimated Number of Breeding Pairs)

CWG area	Lapwing	Curlew
Upper Onny	14	28 - 30
Rea Valley	9 - 10	10 - 12
Camlad (England)	4	4 - 5
Camlad (Wales)	6	2 - 4
Total	33 - 34	45 - 50

NB. The apparent discrepancy in Curlew total due to a pair in SO29S nesting very close to the border, and therefore being counted as "Possibly Breeding" in both countries

The Upper Onny Wildlife Group has been doing this work since 2004. In those 13 years,

- Lapwing, after an initial decline from the number found in 2004 (19 pairs), recovered after intensive conservation work, but a subsequent decline returned the population to the same number as 2004, with a further fall to 13 – 15 pairs in 2015, and 14 pairs in 2016

- Curlew has shown a steady decline from an estimated 38 pairs in 2004 to only 28 – 30 in a slightly larger area now – a loss of 29%, almost one-third, in only 13 years.

3.10 Links with the LPS Curlew Country Nest Monitoring work

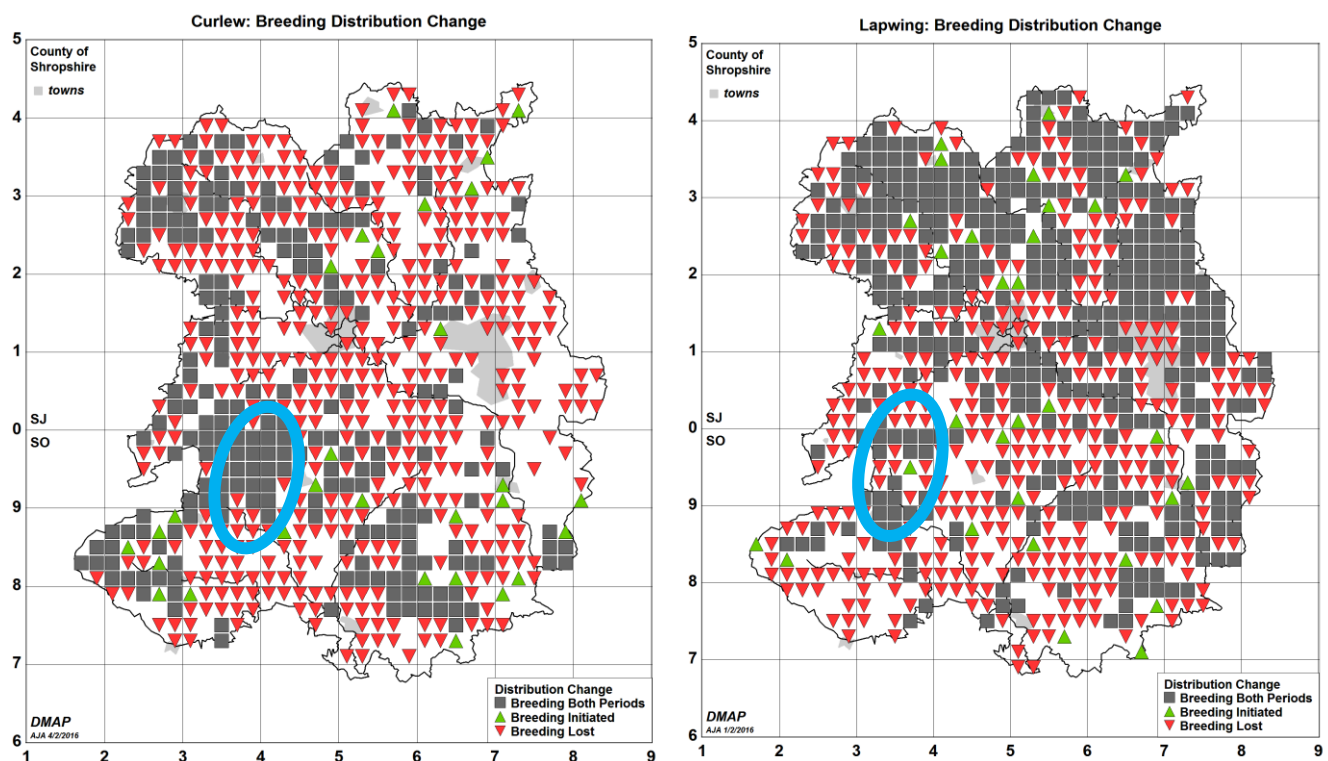
As a result of this evidence, and in the hope of reversing these declines, the Upper Onny Group actively supported the bid for funding for the LPS, and proposed the development of Community Wildlife Groups across the whole area, and the establishment of a Ground-nesting Bird Recovery Project within the LPS programme. 97% of the people who responded to the public consultation on the bid supported action to reverse the decline in the Curlew population.

Observations of Curlews by the Rea Valley Bird Group were passed on immediately to the nest finder, to help the effective targeting of his work. Five of the 19 nests found and monitored in 2016 were in the Rea Valley area.

3.11 Decline of Lapwing and Curlew

Lapwing and Curlew are in decline, nationally, and in the LPS area and elsewhere in Shropshire. Objective evidence for this comes from Bird Atlas work. The distribution maps showing the results of the recent 2008-13 survey in the tetrads in the LPS area can be compared with the same area on the maps shown in An Atlas of the Breeding Birds of Shropshire, based on six years fieldwork 1985-90, and published in 1992. Both sets of maps have been compiled on the same basis, with similar amounts of fieldwork effort, so the decline is undoubtedly real.

The maps show tetrads where each species was found in both Atlas surveys (grey squares) and tetrads where it was found in the earlier period, but not the more recent period (red downward triangles). Surveys including counts complement these maps. The county Lapwing population has fallen from about 2,300 pairs in 1990 to only about 500 now. The Curlew population has fallen from about 700 pairs in 1990 to about 160 pairs now (a 77% decline for both species).



The approximate location of the LPS area is shown by the blue oval. It will be seen that the LPS area is the county stronghold for Curlew.

Other evidence for the decline of Lapwing and Curlew can be found on the website of the British Trust for Ornithology www.bto.org

The LPS area holds about one-quarter of the Shropshire Curlew population. Action to reverse the declines must start by improving the breeding success of the remaining pairs, so conservation action in the LPS area is vital.

Such action is also being taken nationally. 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, and both species are now on the Red List of Birds of Conservation Concern 4, published in December 2015.

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 rewards for farmers for sensitive management of habitat on their farms, and providing other environmental benefits. Farmers applying to join had to take into account the 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 included specific prescriptions, and payments, for Lapwing and Curlew habitat, if the farmer wanted to take them up. Many farms in the LPS area will benefit from HLS agreements for 10 years from the date of signing, the last in 2014.

The data provided by the Upper Onny Wildlife Group, 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.

HLS has now ended, and has been replaced by Countryside Stewardship, a new environmental land management scheme with similar objectives and targeting. New applications were invited during 2016.

3.12 Use of CWG Survey Results

Most importantly, the 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, the new environmental land management scheme, enabling them to target the use of their limited resources more effectively. A letter was sent to Natural England in 2016 supporting an application for Countryside Stewardship from one farm in the area, based on the Group's survey results.

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.

Previously, records at tetrad level were supplied to Shropshire Ornithological Society for incorporation into the Shropshire Bird Atlas. The Atlas project completed six years fieldwork 2008-13, and the results will be published in a new county Avifauna, The Birds of Shropshire, around the end of 2017.

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 them so they retain their value for wildlife.

3.13 Recommendations

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

3.14 Acknowledgements

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

Alison, Elizabeth and Paul Holmes, Amber Bicheno and Gary Price, Anne Yeeles, David Wilson, Dorcas Frame, Geoff Brown, Janet Radford, Jerry Hughes, Julian Bromhead, Kevin Heede, Peta & Phil Sams, Richard Allen, Richard Halahan, Shropshire Wild Team volunteers, Simon Brown, Siobhan Reedy and Tony Legg.

Thanks also to:-

- Matt Cotterill of Natural England, who provided the survey maps.
- Joe Penfold, LPS Community Officer, who organised all the Bird Group meetings and distributed information to members.
- Amber Bicheno, for co-ordinating the Barn Owl project.

3.15 Summary 2016

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

All except five of the 26 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. A Barn Owl project continued.

The populations in the Rea Valley area are estimated at 9 - 10 pairs of Lapwing, and 10 - 12 pairs of Curlew.

The locations of breeding pairs of Curlews were passed on quickly to the nest-finder working for the LPS Curlew Recovery Project.

The monitoring results are 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.

3.16 Plans for 2017

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

The Barn Owl and Woodland Bird nest box schemes will continue, and consideration will be given to developing other activities, similar to those operated by other Community Wildlife Groups, if there is sufficient support. The possibilities will be considered at Bird Group meetings in the course of the year.

Everyone interested in birds is welcome at all meetings and events. A Programme will be published after the Annual Public Meeting. Details can also be found and downloaded from the joint website for all the Community Wildlife Groups in the Shropshire Hills, www.ShropsCWGs.org.uk, and the Landscape Partnership Scheme website www.stiperstonesandcorndon.co.uk/curlewcountry.

Leo Smith
February 2017

Detailed Bird Survey Results 2016

First Period (21 March - 5 April)

Tetrad	L / CU	LPS	Surveyor(s)	Time Spent		Number of Each Species Recorded (Individual Birds)												
				Hrs	Mins	Lapwing	Curlew	Kestrel	Red Kite	Skylark	Meadow Pipit	Cuckoo	Duncock	Wheatear	Stonechat	Linnet	Bullfinch	Yellow-hammer
SJ30 A			(Square not surveyed)															
SJ30 B	YES	??	Anne Yeeles	4	0		1											
SJ30 C	YES	No	(Square not surveyed)															
SJ30 F	YES		Richard Allen	3	0		3											
SJ30 F	YES		(Training Session	2	0		4											
SJ30 G		No	(Square not surveyed)															
SJ30 H	YES	??	(Square not surveyed)															
			Simon Brown	3	30	5												
SJ30 K	YES		David Wilson	3	5		2						1				1	
SJ30 L	YES		Tony Legg	2	50	6												
SJ30 M			Tony Legg	2	50		1											
SJ30 Q	YES		Julian Bromhead	3	30			2	1	7	65		2		5			
SJ30 R	YES		(Square not surveyed)															
SJ30 S			Richard Halahan	3	30					9								
SJ30 T	YES		Geoff Brown	2	15					1			4					
SJ30 V			Amber Bicheno and Gary Price	2	0					7								
SJ30 W	YES		Amber Bicheno and Gary Price	1	40		2											
SJ30 X	YES		Alison and Paul Holmes	3	30				1									
SJ30 Y			(Simon Brown) Shrops Wild Team	3	30	No target species recorded												
SJ40 A	YES		Janet Radford	3	30		1											
SJ40 B			Siobhan Reedy	1	40		3		1									
SJ40 C	YES		(Square not surveyed)															
SJ40 D	YES		Dorcas Frame	4	30					2								
SJ40 F	YES		Peta & Phil Sams	2	45					1	1							
SJ40 G			Peta & Phil Sams	2	35									3				
SJ40 H			Peta & Phil Sams	3	45					2			4					
SJ40 I			Peta & Phil Sams	1	50					1			2					
SJ40 I	YES		Kevin Heede	2	0	No target species recorded												
SO39 E	YES		Richard Allen	2	30		3	1		3								
Totals (26 Tetrads)				66	15	11	20	3	3	33	66	0	16	0	5	0	1	0

Second Period (16 April - 1 May)

Tetrad	L / CU	LPS	Surveyor(s)	Time Spent		Number of Each Species Recorded (Individual Birds)												
				Hrs	Mins	Lapwing	Curlew	Kestrel	Red Kite	Skylark	Meadow Pipit	Cuckoo	Dunnoch	Wheatear	Stonechat	Linnet	Bullfinch	Yellow-hammer
SJ30 A			(Square not surveyed)															
SJ30 B	YES	??	Anne Yeeles	1	20		3											
SJ30 C	YES	No	(Square not surveyed)															
SJ30 F	YES		Richard Allen	2	30		3											
SJ30 G		No	(Square not surveyed)															
SJ30 H	YES	??	Jerry Hughes	2	0	6	1											
			Simon Brown	2	0	No target species recorded												
SJ30 K	YES		David Wilson	2	0		1											
SJ30 L	YES		Tony Legg	2	35	6												
SJ30 M			Tony Legg	2	30					1								
SJ30 Q	YES		Julian Bromhead	4	30				2	10	40	3						
SJ30 R	YES		(Square not surveyed)															
SJ30 S			Richard Halahan	3	20				1	3			3					
SJ30 T	YES		Geoff Brown	2	30		1											
SJ30 V			Amber Bicheno and Gary Price	2	0		2											
SJ30 W	YES		Amber Bicheno and Gary Price	1	30		2											
SJ30 X	YES		Alison Holmes	2	30		2											
SJ30 Y			(Simon Brown) Shrops Wild Team	1	30	No target species recorded												
SJ40 A	YES		Janet Radford	3	10					1	1							
SJ40 B			Siobhan Reedy	3	0		3							1				
SJ40 C	YES		(Square not surveyed)															
SJ40 D	YES		Dorcas Frame	2	15													
SJ40 F	YES		Peta & Phil Sams	2	45					5	2				1	4		
SJ40 G			Peta & Phil Sams	2	30									1				
SJ40 H			Peta & Phil Sams			(Square not surveyed)												
SJ40 I	YES		Kevin Heede	2	0	No target species recorded												
SO39 E	YES		Richard Allen	2	30	No target species recorded												
Totals (26 Tetrads)				50	55	12	18	0	3	20	43	3	4	1	1	4	0	0

Third Period (4 - 19 June)

Tetrad	L / CU	LPS	Surveyor(s)	Time Spent		Number of Each Species Recorded (Individual Birds)															
				Hrs	Mins	Lapwing	Curlew	Kestrel	Red Kite	Skylark	Meadow Pipit	Cuckoo	Dunnoch	Wheatear	Stonechat	Linnet	Bullfinch	Yellowhammer			
SJ30 A			(Square not surveyed)																		
SJ30 B	YES	??	Anne Yeeles		45	No target species recorded															
SJ30 C	YES	No	(Square not surveyed)																		
SJ30 F	YES		Richard Allen	2	30		2														
SJ30 G		No	(Square not surveyed)																		
SJ30 H	YES	??	Jerry Hughes	1	30																
SJ30 H	YES	??	Simon Brown	3	0																
SJ30 K	YES		David Wilson	2	30								2								
SJ30 L	YES		Tony Legg	2	50	4															
SJ30 M			Tony Legg	3	0																
SJ30 Q	YES		Julian Bromhead	5	15					7											
SJ30 R	YES		(Square not surveyed)							11	47					2	3	1			
SJ30 S			Richard Halahan	2	25	1															
SJ30 T	YES		Geoff Brown	2	20					2						3					
SJ30 V			Amber Bicheno and Gary Price	1	30													1			
SJ30 W	YES		Amber Bicheno and Gary Price	2	0																
SJ30 X	YES		Alison Holmes	2	0																
SJ30 Y			(Simon Brown) Shrops Wild Team	3	30																
SJ40 A	YES		Janet Radford	3	20																
SJ40 B			Siobhan Reedy	2	30																
SJ40 C	YES		(Square not surveyed)															1			
SJ40 D	YES		Dorcas Frame	1	15																
SJ40 F	YES		Peta & Phil Sams	2	45																
SJ40 G			Peta & Phil Sams	1	30																
SJ40 H			(Square not surveyed)																		
SJ40 I	YES		(Square not surveyed)																		
SO39 E	YES		Richard Allen	2	30																
Totals (26 Tetrads)				48	55	9	4	3	2	26	47	0	7	1	5	4	2	5			



Rea Valley
Community Wildlife Group

Please Help Barn Owls!!

Special Nest Boxes provided free

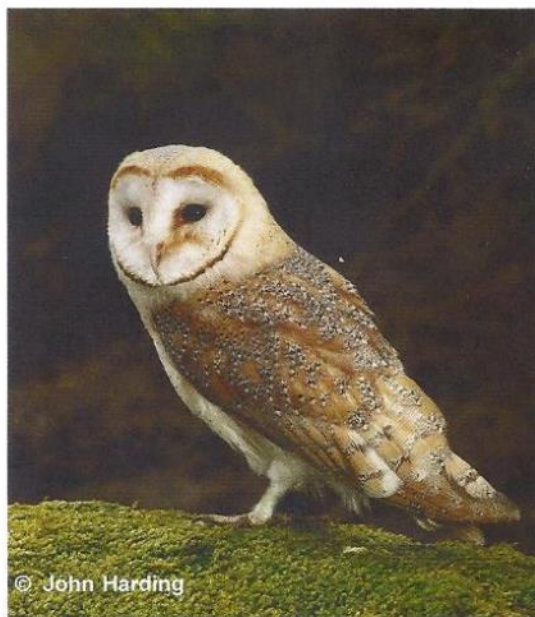
to Farmers & Landowners with suitable habitat in the Rea Valley area, and elsewhere in the Shropshire Hills AONB -

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

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

Barn Owls control pests such as rats and mice, but the population has declined in Shropshire and elsewhere. Loss of habitat - rough grassland for hunting prey - is the major factor, but loss of suitable nest sites has also contributed. Traditional open barns have been enclosed, replaced by different types of barn, or converted into houses. Other suitable nest sites - holes in large isolated trees - have also disappeared from the landscape in recent times, as trees have died off or been removed. The decline in the County population has recently been halted and reversed, but it is still around only half that found by a survey carried out in 1932.

Barn Owl is on the *Amber List of Birds of Conservation Concern 3 (2009)*. Increasing the population, partly through nest boxes, is part of the *Shropshire Biodiversity Action Plan*. 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.



*For further information,
or to report a Barn Owl sighting in the Rea Valley area, please contact*

Amber Bicheno

07540730967

amba_b@hotmail.co.uk

Thanks to the Shropshire Hills AONB Partnership and the Stiperstones-Corndon LPS (funded by Heritage Lottery) for funding the development of Community Wildlife Groups. This initiative to help Barn Owls in the Rea Valley complements similar work by several other Groups. See the Community Wildlife Groups website www.ShropsCWGs.org.uk for further information about how to get involved

4 Curlew Country Report for Community Wildlife Groups

2016 was a very busy year which saw the project grow and consolidate considerably.

4.1 Nest Monitoring and Intervention

David Tompkins joined contract Field Ornithologist, Tony Cross to assist with the nest monitoring work. This year over 21 nests were located, but the results (summary overleaf) were similar to last year. We have now monitored over 30 nests closely often with the aid of cameras and thermacrons, but none of the nests have produced any surviving curlew. This year we found new nest sites across the LPS area as well as monitoring some former sites.

The main predator at egg stage has been the fox, although there have been a few badger incidents and one nest was destroyed by sheep this year. The Game and Wildlife Conservation Trust have been supporting the project as a partner and put it in touch with a NABU project in Schleswig Holstein where electric fencing has been used to protect nests. We trialled fencing on three nests this year and these were the only three nests that reached egg hatching stage, all the other nests were predated at egg stage.



Chicks from each of the three nests that survived this year were radio tagged, but as with the results from last year, all the chicks were predated within days of hatching. They were mainly taken out of radio signal, so that it is not possible to find a predator pattern. Signs of avian and fox predation of chicks have been found over the two years, but only in one or two cases.

It is now fairly certain that protecting nests with electric fencing will enable chicks to hatch. We have also been more informally monitoring the grassland length that adult curlew choose as a nesting site and as they are site faithful, know roughly where our local birds will settle. The survival of higher numbers of chicks would help us to know what they require to fledge successfully. Mandi and Tony recently had the opportunity to meet with the Project Manager of the German study in Schleswig Holstein. The findings of that project over a much longer period are that the fencing can protect eggs, but chicks are lost and chick survival rates in the German project will not sustain the population. Curlew country is now at a similar stage in findings to this project.



Fox control is taking place this year in two trial areas. GWCT and BASC have been advising on this. There is good research to suggest that predation control helps waders to fledge. Farmers and pheasant shoots are already carrying out fox control, but it is not necessarily tailored to the ground-nesting bird season. A lot of work has gone into developing a contract designed to be as effective and humane as possible during the nesting season.

In the long term neither fencing nor lethal fox control is likely to be sustainable in their own right, but what intervention is reasonable and achievable can only be ascertained when and if there is a sustainable curlew population.

4.2 Arts Activities

Mary Colwell Hector's walk across from Ireland to the Wash to raise awareness of the plight of curlew, enabled us to enhance the awareness raising activities during this year. Sculpture and writing workshops took place along with the composition of music and lyrics to be performed by a specially formed 'Curlew Choir'. Events were launched in May during Mary's walk through our area and culminated in a spectacular event in July at Norbury. The arts events have been funded by HLF through a separate arts funding stream in the LPS. These events and the many talks that Mandi and Tony have given this year have inspired others to support the project.

4.3 National 'lowland' curlew picture

The RSPB are monitoring and trialling curlew intervention in moorland and upland areas. Mary Colwell Hector has been influential in discovering what work is taking place across the country. It is now estimated that there are only 230 pair of curlew outside these mainly northerly (often reserve) areas. Mandi and Tony recently participated in a 'Call of the Curlew' symposium at Slimbridge (Tony gave a talk on the nest monitoring and Mandi was on a 'Solutions to curlew problems' panel). The Curlew Country project is trail blazing in its holistic approach. Some monitoring is taking place, but not as precisely as ours has been. Nationally in lowland situations, a few projects have been working well with farmers on habitat creation and protection. Awareness raising and arts events do not appear to have started elsewhere yet.



4.4 2017/18 plans

We have managed to raise enough funding for much of the work planned for this year. This will include:

- Nest monitoring – this will no longer be carried out with cameras, but done by observation from a distance
- Intervention – More electric fencing will be used where possible. Fox control is being carried out in trial sites. Other interventions will be trialled.
- Arts and awareness raising – A training film is to be produced by local wildlife cameraman Ben Osborne and this may possibly be in collaboration with other organisations.
- A reminiscences project is just starting with the aim of recording people's memories of waders in our landscape. This will be important, not only in case we lose these precious birds altogether, but we hope it will also give us insights into the way farming has changed and whether there are more or fewer challenges for farmers.
- A local artist is taking 'The Case for Curlew' project into local schools as many children and young people do not know what a curlew is.
- Business trials to assess the impact of supporting breeding curlew on farms will continue alongside the on-the-ground interventions. A number of farms with curlew nesting or foraging on them are part of an agri-environment scheme, but this has not yet saved their decline. Our results will be fed back to policy makers to influence outcomes based incentives that will deliver the right combination of support for waders.

4.5 Beyond the LPS

We have been investigating potential legacy options for the project beyond the life of the LPS which will complete in April, 2018. We believe that to maintain the work of the project, it will be crucial to find a hosting organisation that can demonstrate not only the ability to fund the project, but also to continue the good working relations with the land managing community which have been the key to the success of LPS Curlew Country Project. We are fortunate in that our funders have indicated that they wish to continue to help us, but match funding must be found after the life of the LPS

4.6 Nest Monitoring - Summary of year 2 (2016 findings)

A total of 21 nests were located.

- Two of these nests were found with no eggs in, and one was found after a predation event.
- A total of 63 eggs were observed: fifteen full clutches comprising one nest with six eggs, nine nests with four eggs, four nests with three eggs and one with two eggs.
- Two nests with two eggs and three nests with one egg were predated before the assumed full clutch had been laid.
- The total of nests which failed at the egg stage was 17. One was abandoned, two were badger predated, three were fox predated, two were considered highly likely to have been badger predated, five were considered highly likely to have been fox predated, one was trampled by sheep and three were lost to unknown predators.

A total of seven eggs from three clutches hatched and all chicks were tagged (one clutch of three chicks and two clutches of two chicks).

- These three nests were protected during the second half of incubation with electric anti-predator fences.
- None of the chicks survived: one chick was run over and killed by an ATV approximately a week after hatching, three other chicks were known to have been predated and the tags were retrieved.
- The other three chicks were assumed predated as tags could not be located and there was no adult activity to suggest the presence of chicks.
- One nest (not found) was assumed to have been mown in a silage field, although the evidence for this is circumstantial.

Amanda Perkins
February 2017

5 Rescuing Rocks & Overgrown Relics Moth Events 2016

5.1 Aims

This report presents the results of work commissioned by the Stiperstones & Corndon Hill Country Landscape Partnership as part of the Rescuing Rocks & Overgrown Relics project. This will re-create and restore specific BAP habitat on six ex-quarry and mining sites within the Landscape Partnership Scheme area which are now regionally and nationally important for wildlife.

The aim was to undertake a series of six introductory moth recording workshops during the summer of 2016 at the six sites covered by the project. These are: -

- o The Bog
- o Earl's Hill SWT Reserve
- o Nills Hill Quarry
- o Poles Coppice Countryside Heritage Site
- o Roman Gravels mine
- o Snailbeach mine

This report collates the moth records collected during the workshops and follows on from a similar project also commissioned by the Stiperstones & Corndon Hill Country Landscape Partnership carried out in 2015 (Green, 2015).

5.2 Summary of 2015 moth workshops

During the 2015 moth workshops, 600 moth records were obtained during the sessions and a total of 288 species of moth were recorded. The moths recorded in 2015 include three Nationally Notable species and a number of other moths that are of significance in a local context.

5.3 Definitions

The species names, code numbers and systematic order used in this report conform to the usage in Checklist of Lepidoptera recorded from the British Isles (Bradley, 2000) as updated by Langmaid & Agassiz (2005), Fox et al. (2006) and Fauna Europaea (www.faunaeur.org, accessed on 27 September 2014).

Scarcity and threat categories for Lepidoptera derive from the UK Biodiversity Action Plan (UK Biodiversity Group, 1995, 1999a & 1999b, Biodiversity Reporting & Information Group, 2007), the UK Red Data Book (Shirt, 1987) or published reviews (Parsons, 1984, 1993 & 1995). Waring (unpublished) is used for macro moths and Davis (2013) for micro moths. Regional status derives from the Butterfly Conservation regional action plan for the west Midlands (Joy & Williams, 2008). Information on moths in Shropshire comes from A natural history of the moths of Shropshire (Riley, 1991) and The smaller moths of Shropshire: Their status, distribution and ecology (Blunt, 2014).

Names of plants conform to New Flora of the British Isles (2nd edition) (Stace, 1997).

5.4 Methods

The workshops took place as follows: -

Site	Date
The Bog	10/06/2016
Roman Gravels	17/06/2016
Earl's Hill SWT Reserve (Pontesford Hill car park)	15/07/2016
Snailbeach mine	22/07/2016
Poles Coppice Countryside Heritage Site	29/07/2016
Nills Hill Quarry	05/08/2016

The dates of the workshops were chosen to maximise the chances of recording additional species to the 2015 events. A range of moth recording methods were demonstrated and guidance given on identification and sources of equipment. All but two events were carried out in conditions favourable for moth recording. The exceptions were The Bog and Poles Coppice Countryside Heritage Site (cool and raining and cold respectively).

Due to safety considerations, the event at Earl's Hill SWT Reserve took place adjacent to the reserve car park rather than in the reserve proper.

5.5 Results

546 moth records were obtained during the 2016 sessions and a total of 282 species of moth were recorded.

The species totals for the individual sites appear below: -

Site	2016 species	2015 species	Both years
The Bog	40	91	119
Earl's Hill SWT Reserve (Pontesford Hill car park)	156	126	199
Earl's Hill SWT Reserve (slope below hill fort)	-	80	80
Nills Hill Quarry	90	127	192
Pole's Coppice Countryside Heritage Site	53	103	134
Roman Gravels	67	46	100
Snailbeach	141	25	161
All sites	282	288	379

The high totals for Earl's Hill SWT Reserve and Snailbeach in 2016 and Earl's Hill SWT Reserve and Nills Hill Quarry in 2015 are absolutely exceptional and reflect the great richness of these sites for moths.

Other than the 2015 moth workshops, there has previously been little moth recording carried out at any of these sites. Many species recorded in 2016 are likely to be new site records and, in the case of the more northerly sites, new records for the 10-km squares.

All records gathered during the course of this project appear in Appendix 1. These have also been supplied to the project in electronic format as a Microsoft Excel spreadsheet. Records have also been supplied to the County Moth Recorders for Shropshire for incorporation into local and national datasets.

The moths recorded in 2016 include three Nationally Notable species and a number of other moths that are of significance in a local context. These species are listed and briefly discussed below.

5.6 Nationally Notable species

Caryocolum blandella (Douglas, 1852)

National status: Nationally Scarce B

One recorded at Earl's Hill SWT Reserve (Pontesford Hill car park) on 15 July 2015.

Caryocolum blandella is locally distributed in England and Wales. All previous Shropshire records are from the south-west of the county.

This micro-moth generally occupies hedgerows and woodland habitats. The larvae feed on greater stitchwort *Stellaria holostea*, at first in a mine, then in spun shoots or seed capsules.

Blomer's Rivulet *Discoloxia blomeri* (Curtis, 1832)

National status: Nationally Notable B

One recorded at Nills Hill Quarry on 5 August 2016. Also recorded at Earl's Hill SWT Reserve (slope below hill fort) on 12 July 2015. The moth occurs sporadically throughout England and Wales.

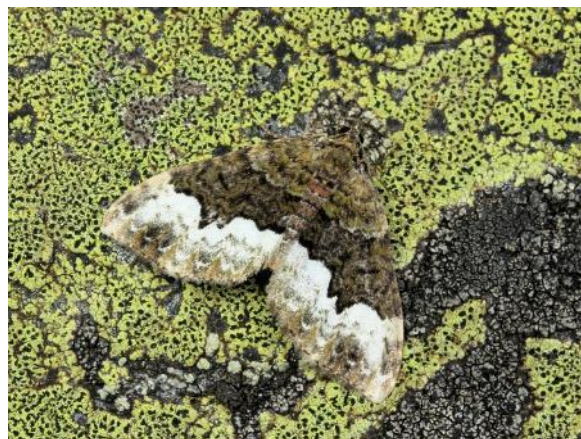
The Blomer's Rivulet is associated with deciduous woodland habitats where the larvae feed on the leaves of wych elm *Ulmus glabra*.

Cloaked Carpet *Euphyia biangulata* (Haworth, 1809)

National status: Nationally Notable B

Three recorded at Earl's Hill SWT Reserve (Pontesford Hill car park) on 15 July 2016 and one at Snailbeach on 22 July 2016. Also recorded at the Bog in 2015. A scarce species occurring sporadically in the south-western counties of England and Wales, and the Isle of Man. Seemingly a recent colonist in Shropshire and still very scarce in with no records appearing in Riley, 1991.

The Cloaked Carpet is stated to be associated with damp, mossy woodland and wooded rocky ravines with streams and also in old banked hedgerows along sunken lanes. The larvae are believed to feed on stitchworts *Stellaria* spp.



5.7 Other species of note

The Annulet *Charissa obscurata* ([Denis & Schiffermüller], 1775)

National status: Local

Two individuals recorded at Snailbeach mine on 22 July 2016.

The Annulet is a very local and declining species. It is fairly widespread throughout Britain but mainly coastal in distribution. There are now very few inland sites and extremely few previous Shropshire records.

At inland localities, this is a species strongly associated with quarries and exposed and rocky upland grassland. The larvae of this species feed on the leaves of a range of low-growing herbs. This is

one of the specialist moths that can particularly be expected to benefit from the conservation work carried out through this project.

Lobster Moth *Stauropus fagi* (Linnaeus, 1758)

National status: Local

One recorded at Roman Gravels on 17 June 2016. Also recorded at Nills Hill Quarry on 12 June 2015 (5 individuals) and Pole's Coppice Countryside Heritage Site on 26 June 2015 (14 individuals). The 2016 record at Roman Gravels is away from any area of potentially suitable habitat and is likely to represent a dispersing individual.

The Lobster Moth is well distributed and sometimes frequent in southern, south-west and south-east England, and in Wales. It is more local in East Anglia and the southern half of the Midlands which, until very recently, represented the northern limit of the species' range. The moth was not known at all in Shropshire until the early 2000s but has now colonised and appears to be expanding northwards through the county. The count of 14 individuals at Pole's Coppice Countryside Heritage Site on 26 June 2015 is quite exceptional and suggests that the moth is now well established in the Stiperstones area.

The larvae live on the leaves of various deciduous trees including beech *Fagus sylvatica*, birches *Betula* spp. and oaks *Quercus* spp.

Black Arches *Lymantria monacha* (Linnaeus, 1758)

National status: Local

carpet

Two individuals recorded at Earl's Hill SWT Reserve (Pontesford Hill car park) on 15 July 2016.

The Black Arches is a local species associated with mature deciduous woodland. The larvae feed mainly on oaks *Quercus* spp. but also a range of other trees.

This is a species formerly restricted to southern England. The moth was first recorded in Shropshire, in the Wyre Forest, in 1984 but not found again until the 1990s. Like the Lobster Moth, it is now expanding northwards through the county and appears to be established in the Stiperstones.



5.8 Project publicity

A presentation on the results of the 2015 moth workshops, "Marvellous Moths of The Mines & Quarries", was given to the annual meetings of the Camlad and Rea Valley Community Wildlife Groups on 28 February and 1 March 2016. Similar presentations are planned for the winter of 2016/2017.

5.9 Conclusions

The results of the workshops have again greatly exceeded expectations. The species diversity and the number of scarce and specialist species recorded is outstanding. The six sites covered by the Rescuing Rocks & Overgrown Relics project are clearly all exceptional sites for moths.

As in 2015, the level of attendance at the workshops and the enthusiasm of the participants were also most encouraging. It has been particularly pleasing to see the level of expertise rise as the workshops progress. The more regular participants are now recording moths themselves and are able to use field guides to give confident and accurate identifications of sometimes difficult species.

5.10 Acknowledgements

This work was commissioned by the Stiperstones & Corndon Hill Country Landscape Partnership as part of the Rescuing Rocks & Overgrown Relics project. It is funded through a Landscape Partnership Scheme fund, and the main contributor to this project is WREN (Waste Recycling Environmental Network Ltd.).

The author would like to thank John Brayford for arranging the events and John Brayford, and Joy Howells for their superb organisation and assistance during the events themselves. Particular thanks are again due to all workshop participants for their great enthusiasm and for making the workshops such an enjoyable experience.

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David Green
February 2017

6 Resting Hill Nestbox Scheme 2016

Resting Hill Wood is located on the slopes of the Stiperstones National Nature Reserve above the village of Snailbeach. It is a coppiced oak woodland, which is still actively managed.



The Pied Flycatcher *Ficedula hypoleuca* is a charismatic species of migratory bird, which breeds in oak woodland across the UK during May and June. It uses cavities in mature trees for nest sites. Loss of habitat has caused a decline of in this species, sufficient to have it recently move from the Amber list of Birds of Conservation Concern to the more serious Red list.

This species was known to be present at Resting Hill Wood in the past but a full survey of the wood in 2014 found no Pied Flycatchers at all. The nest box scheme began in 2015 and was immediately successful with 5 Pied Flycatcher nests recorded (see previous report for details).

The nest boxes were erected and monitored using the methodology provided by the British Trust for Ornithology (BTO) Nest Record Scheme. Data was submitted to the BTO as part of this scheme.

6.1 Summary Headlines

- Box uptake up by 60% (9 additional boxes used) from 2015
- Pied Flycatcher numbers up by 6 nests
- Blue Tit numbers up by 1 nest
- Great Tit recorded using boxes for first time with 2 nests
- Overall success rate down for Pied Flycatcher by 17%
- Blue Tit success rate remained similar to 2015
- Great Tit showed similar success rate to Pied Flycatcher during 2016
- Number of Blue Tit fledglings down by 1 from 2015
- Number of Pied Flycatcher fledglings up by 23 from 2015
- Nesting period later during 2016 for both Blue Tit and Pied Flycatcher.

6.2 Results

Species are referred to by their BTO 5-letter codes as follows: PIEFL – Pied Flycatcher; BLUTI – Blue Tit; GRETI – Great Tit.

Box Uptake

Table 1 shows the figures relating to uptake of nest boxes by each species.

Table 1. Nest Box uptake in 2016

	#	Proportion of all boxes	Proportion of occupied boxes	Change since 2015
Total Boxes	54			
Total Occupied	24	44%		+60%
Occupied by BLUTI	11	20%	46%	+10%
Occupied by PIEFL	11	20%	46%	+120%
Occupied by GRETI	2	4%	8%	New to site

2016 saw a massive uptake in boxes in the wood. We saw the number of Pied Flycatcher nests more than double and we also had the first nests of Great Tit on the site. We still saw no Coal Tit, Nuthatch or Redstart despite their continued presence in or near the wood.

We also had the unexpected surprise of at least two species of rodent building nests in the boxes, Wood Mouse (and/or Yellow-necked Mouse) and the protected Hazel Dormouse. The Dormouse record is particularly exciting as the first confirmed sighting in the wood.

6.3 Nest Success Rates

Table 2. Nest success rates

Species	BLUTI	Change from 2015	PIEFL	Change from 2015	GRETI
Total broods	11	+1	10	+5	2
Total successful ¹	9	-	9	+4	2
Success rate	82%	-8%	90%	-10%	100%
Complete successes ²	2	-	3	-	0
Complete success rate	18%	-2%	30%	-30%	0%
Total eggs laid	95	+2	71	+39	14
Average clutch size	8.6 (5-10)	-0.66	7.1 (5-8)	+0.7	7(6-8)
Total eggs hatched	91 (96%)	+7%	71 (100%)	-	14(100 %)
Total young fledged	58	-1	52	+23	10
Overall success rate ³	61%	-2%	73%	-17%	71%

¹ Successful broods were those that fledged at least one chick

² Complete success was determined as those broods which fledged 100% of young

³ Overall success rate was the proportion of eggs that resulted in fledged young

Blue Tit Productivity

Blue Tit productivity remained stable compared to 2015. Overall success rate was very similar in both years and despite an additional nest, the total numbers of eggs and chicks were very similar – this is reflected by a smaller average clutch size. The proportion of eggs that hatched was slightly higher but the proportion that fledged slightly lower. This resulted in an overall 2% reduction in overall success. This translates into 1 less chick fledged than last year. Hardly, a resounding failure, and, in fact, remarkably consistent.

Pied Flycatcher Productivity

The good news in terms of our main target species, is that numbers increased hugely. There were 11 confirmed nesting attempts, and possibly one other. Sadly, the reason we do not know for sure about the 12th nesting attempt is that if it was a nesting attempt, it was predated by a rodent along with another clutch nearby. Egg fragments were found in two nests, but in only one of them was an actual egg count obtained. Therefore, they cannot contribute very much to the data. Thankfully, this still left 10 active nests, which is exactly double that of 2015.

Of course, with this increase in number of nests came the obvious increase in numbers of eggs and chicks. The average clutch size was actually higher in 2016, which meant that there was a higher proportional increase in eggs laid overall. Sadly in opposition to this, relative success rates were significantly poorer than in 2015. One nest completely failed and only three were completely successful with all eggs hatched and chicks fledged. Hatching success remained perfect with all eggs appearing to hatch successfully, but due to fatalities at chick stage, sadly overall success fell by 17% from 2015. Having said all that, due to the

to an active tit nest. The Pied Flycatcher that nested the furthest from an active tit nest was actually one of the most successful attempts.

It is hoped we can continue to examine this aspect of nesting behaviour, but it may be possible that we simply can't detect any underlying patterns at this level, or there are other variables at work that are not accounting for (the presence of natural nest sites, which were not looked for but almost certainly present somewhere, for example).

6.5 School Visits

We conducted two school visits to the resting hill site for students at local primary schools so that they could witness the nest boxes they helped to build being actively used. During the first visit small groups of children were taken up on site and sat quietly a safe distance from an active box, from here they would then wait and watch the adult Pied Flycatchers flying in with food for the young birds. The children did not open up the boxes to look inside as we did not want to cause any excess stress for the birds or to exceed our once weekly check.

The second site visit was conducted a month after the first visit. Unfortunately, all the birds had fledged by this date, however without the fear of upsetting the nests the children could look into the boxes unimpeded, and through this they were able to learn a little about the different species nests, and how we would check the boxes normally.

6.6 Future Work and Maintenance

For continuation in 2017 one of the most important tasks will be recruiting more volunteers. This year has seen a decline in the groups numbers, which will need to be replaced if we wish the project to continue to grow and for us to learn more about our local birds. We hope that with further promotion through the LPS, online and locally that more people will be interested in getting a glimpse into this avian life cycle, allowing us to progress as a survey group.

It will be important that full training is given to all new recruits, so a training session and presentation will need to be arranged for early April 2017. This will include a site visit so that people can get used to the slightly challenging terrain.

There is a small amount of maintenance that is required on site, with one of the boxes having fallen off the tree, others needing new wire, replacement hooks, repaired lids and in some cases just rewritten numbers. Most of these issues can be fairly easily addressed during a maintenance session in November.

Bird ringer Andy Spencer also noted that the additional piece of wood inside the lid makes ringing the birds more difficult as the lid needs to be open more for him to pick up the birds. As this piece also swelled in the wet and made opening and closing the boxes difficult while checking them, removing it from all the boxes possible may be beneficial.

During the recording of 2016 some boxes were missed, this has led to anomalous results and missing data. To improve this, volunteers could be given a printed check sheet for boxes and write something for every box to make missed data easier to spot while still on site.

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Bird ringer Andy Spencer

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Amber Bicheno & Gary Price
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