

# Landscapes of the Lark – Citizen Science Report



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## 1.0 – Introduction

Skylarks (*alauda arvensis*) are a bird listed as Red Status on the Birds of Conservation Concern list having undergone large declines, with an estimated 63% loss since 1967. Since the 1980's, the RSPB has estimated that 68 million individual skylarks have been lost (RSPB). Their numbers have declined further in the period 1995-2000 by 15%, though their range is widespread and has only contracted a little (BTO). They are one of 19 birds on the Farmland Indicator list, which is one of their preferred habitats. Skylarks are estimated as having 1,550,000 territories frequenting farmland, grassland, heathlands and upland habitats.

Skylarks breed between April and August and nest on the ground in short grass and crops. As previous Stroud Valleys Project surveys have mentioned they prefer flat terrain and low vegetation (Stroud Valleys Project, 2021). They avoid vegetation over 60cm in height (Game & Wildlife Conservation Trust). This low-level grassland allows them to see predators approaching and raise the alarm call to other nesting birds.

A citizen science project was run on the back of previous more detailed 2021 Stroud Valleys Project skylark survey to help monitor the skylarks in the Stroud District Area to see how numbers were doing and which habitats the public were spotting the birds in.

## 2.0 – Method

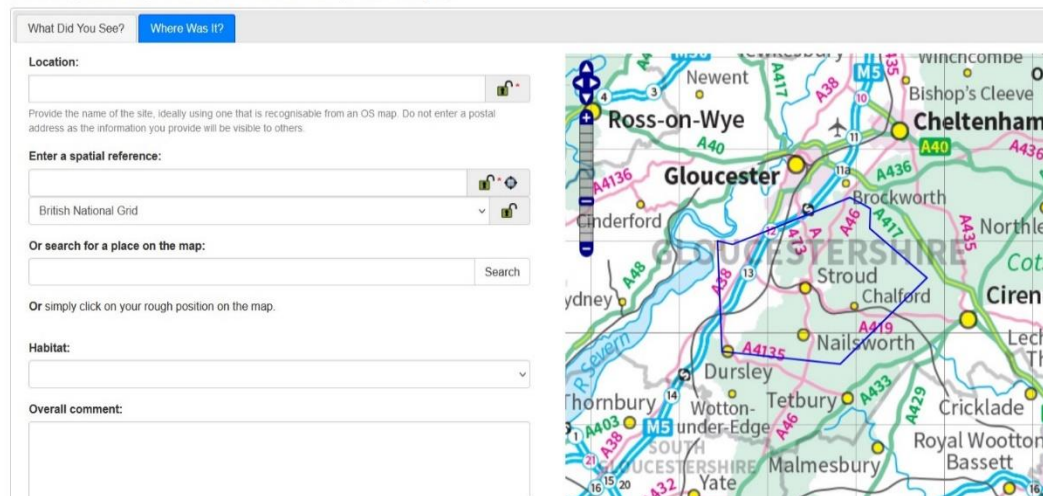
Members of the public were encouraged to record skylark sightings throughout the spring and summer, wherever they may see them in the Stroud area (See screen print of the map below). There were no set transects as on previous projects. Recorders were asked to record where skylarks were seen, how many and in what habitat. They were also asked to record any pressures the skylarks were under during the nesting season.

Figure 2a – Area covered by iRecord survey

Enter a list of records (for a site on a date)

**Species group forms:** the recording form below allows you to record any species, but note that some species groups have their own custom recording forms that allow you to record extra information relevant to that species group. There are forms for bats, bryophytes, dragonflies, moths and others. See the full list in the "Record" menu, under "Species group forms".

The records you enter using this form will be added to the **Landscapes of the Lark** group.



The screenshot shows the iRecord web interface. On the left is a form with the following fields: 'Location:' (text input), 'Enter a spatial reference:' (text input with a dropdown menu set to 'British National Grid'), 'Or search for a place on the map:' (text input with a 'Search' button), 'Or simply click on your rough position on the map.' (checkbox), 'Habitat:' (dropdown menu), and 'Overall comment:' (text area). On the right is a map of Gloucestershire, UK, with a blue polygon highlighting the survey area around Stroud and Cheltenham. The map shows major roads like the A40, A436, and A435, and towns such as Gloucester, Stroud, Cheltenham, and Tetbury.

The public were asked to submit their sightings through iRecord under a special project that was created titled Landscapes of the Lark (<https://irecord.org.uk/join/landscapes-of-the-lark>).

They were given special instructions on identification, referring them to the RSPB Bird identification guide online and asking them to use the Merlin Bird identification app. This app was particularly useful in not only having identification features for the birds but also the ability to record the bird song to aid with identification.

As well as recording skylarks we also asked them to record other ground nesting birds like meadow pipit (*anthus pratensis*).

### 3.0 – Uptake

As with previous projects, the Landscape of the Larks project was advertised on legacy and social media, including Facebook and Instagram. It was also advertised throughout the season alongside other Stroud Valleys Project events. Uptake was lower than expected, but feedback from social media on the project was both positive and useful. The data collected was also useful in showing skylarks outside the original previous project areas, which were solely focused on Rodborough Common.

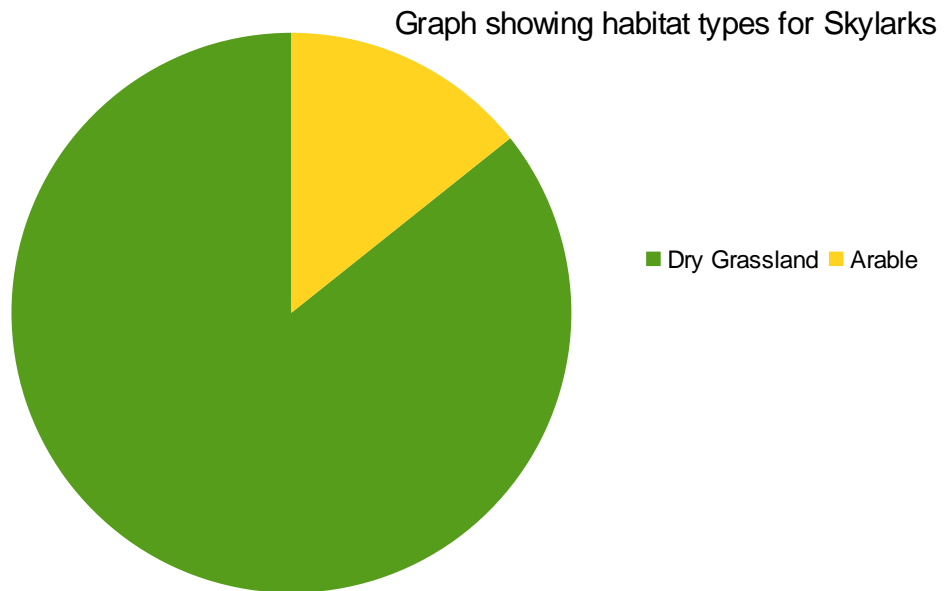
## 4.0 - Results

### 4.1 – Habitats

Previous studies were confined to the limestone grasslands of Rodborough Common. As we opened up this survey to a wider area there was the chance to see if skylark were observed in any other habitats.

The results showed that most citizens preferred to record from the limestone grassland areas of either Rodborough or Selsley Commons. However, we did get a couple of records from arable land. I suspect that there may be more unrecorded arable sites in the area supporting skylark, but that access may be an issue. The commons are open access, and many people walk there or use the areas for dog walking. Farmland however is different in that some may have no public access and others only access from Rights of Way. It was good to see some arable records showing that farmland in the area may also be supporting skylark, and unlike the commons may be less disturbed. The prevalence of recording on the commons could also be reflective of the focus of this project, concerned as it was primarily with the Stroud commons, promoting these as sites for skylark observation accordingly.

Figure 4.1a – Skylark habitat graph



#### 4.2 – Observations

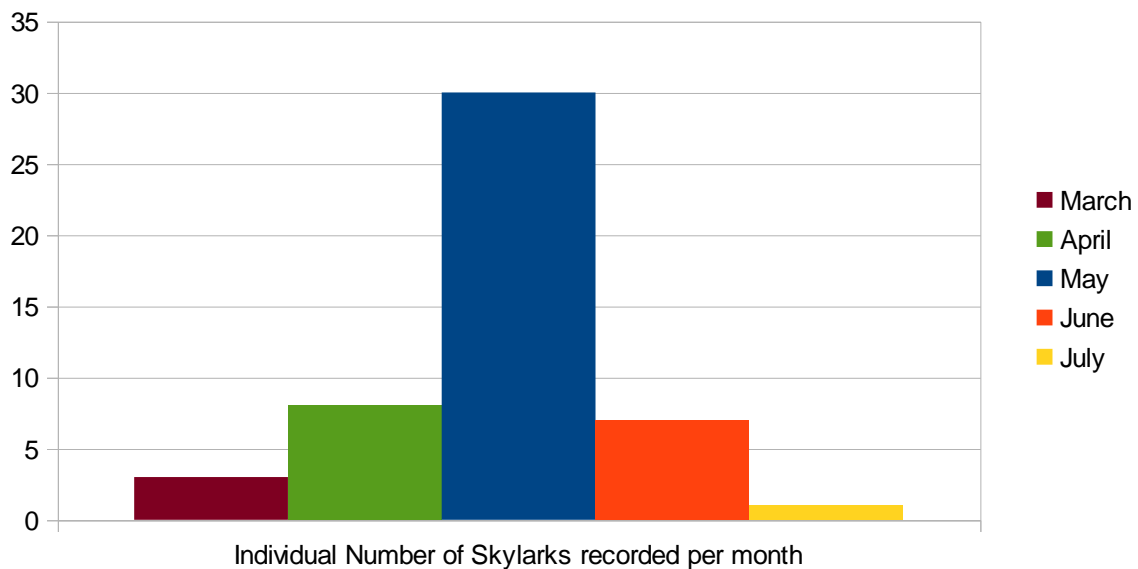
In total 47 skylarks were recorded across the summer by 16 individual recorders. The number is approximate as there was one estimate of numbers for which I have taken the higher value. It is quite difficult to count skylarks in the field and often you can hear them but not see them. Data pulled through from iNaturalist to iRecord also did not state numbers, so was counted as just one record for each. I suspect that 47 is actually a underestimate if anything. There was one record of meadow pipit from the survey which was identified by sound using the Merlin Bird app.

Most of the skylarks were recorded on dry grassland with only two records from arable land from an observer who had access to the farm. Farmland for skylarks can pose its own challenging management styles, if they nest amongst fields for used for forage then cutting these fields at the correct times needs to be part of yearly management practices. The move from Spring sown crops to Autumn sown crops its thought to have reduced the number of clutches of eggs raise each year.

#### 4.3.- When were the skylarks seen?

The largest number of skylarks were observed in May, which is quite early on in the season. This could be due to the fact that skylarks are easier to observe in lower grass swards or as numbers are reinforced by migration. 30 individuals were counted in May. Another option is that the recorder spent more time on site counting and other observations were more casual observances.

Figure 4.3a – Timings of skylark recording



Another limiting factor on records was the weather. We had the 6th wettest July on record and August was also relatively wet (Met Office). This led to there not being many dry weekends when people may have been out on walks and potentially recording. This may account for July having few records and none being sent in for August, a time when you might expect more records.

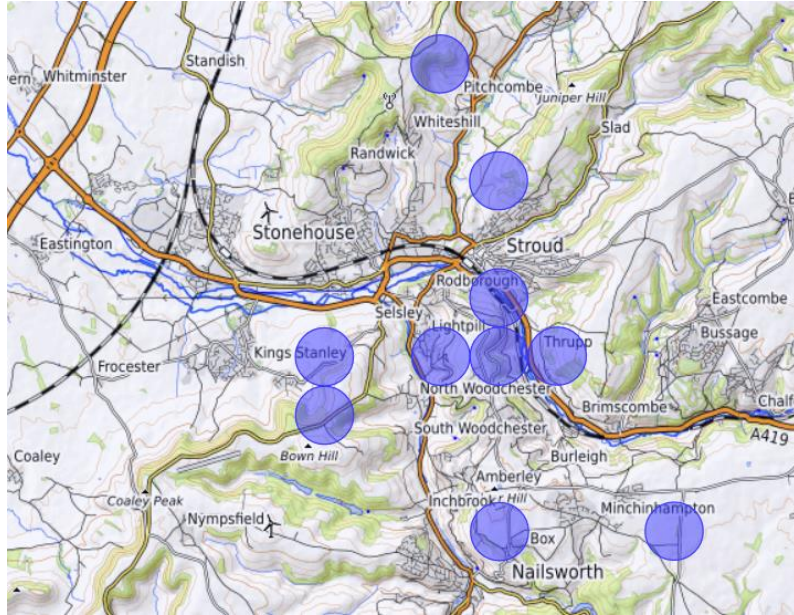
#### 4.4- Where were skylarks seen?

As seen below the distribution of skylarks across the Stroud Valleys was quite wide, but as mentioned before very much concentrated on the limestone grasslands where people tended to



walk. They also appear to have favoured high elevations and choose flat areas to nest. This likely helps them avoid predation, but also allows them to call clearly to mates.

Figure 4.4a – Location of Recorded Skylarks



## 5.0- Discussion

Comments about disturbance and habitat were encouraged from the outset. From the iRecord records there was comment around dog off lead on the commons, a common problem in public access sites. Further discussion was had on Facebook from members of the public, both dog owners and other commons users. The general consensus was that there were too many dogs off lead during the skylark breeding season. In one case a dog was observed chasing off the skylarks. This cannot be having a good affect upon the breeding success of the skylarks and is a cause for concern.

Another comment from a public member was, 'Don't the cows also crush the nests?' I found this an interesting comment. Cattle must be responsible for some egg crush losses as they would in the case of accidentally ingesting caterpillars of butterflies we are trying to conserve. However, without the cows grazing the meadows the skylarks and butterflies alike would have no habitat in which to live. Therefore, despite losses from cattle disturbance overall, they will be helping to maintain or increase skylark numbers. This is in contrast to dog disturbance, with dogs representing predators, forcing skylarks to move on and abandon nesting. When this observation was made in person or on social media, we were able to explain this distinction to the commenter.

Sward length was not in the scope of this recording project, but as mentioned in the previous SVP project, this is important for skylark nesting. All sites where skylarks were recorded have some form of grazing, thus keeping the grass sward lower, including the farm where they were recorded.

## 6.0 – Limitations

The project was limited in scope by several factors.

Firstly, the amount of people volunteering. To get a good picture it is always good to have a good strong set of observations. However, if these volunteers took part in subsequent years, it would help us build up a picture of how well our local skylark population is fairing.

Time limits affecting number counting. As mentioned earlier there were no limits on the time a person spent on a site recording skylark, it was more a presence and absence exercise in that respect. Someone spending half a day on the common would of course have observed more than someone taking a casual walk across the common.

Access to farmland for future projects should be looked at. We are very aware that our local commons are good nesting sites for our declining skylarks, despite pressure from people and dogs. What we don't know is how many of our local farms are supporting populations of skylarks and to what extent. They are of course disturbed by daily and yearly farmland activity, but not by people pressure and dog walkers.

If extent and quality of data are primary objectives for future citizen science projects, it would be preferable to have a larger number of guided and clearly defined skylark spots, following specific transects. This would necessitate more preparation and expert intervention than was possible for this project but would likely glean better results. For example, the previous SVP survey carried out weekly set transects over a 3-month period.

If, however, the goal is to raise awareness of species and habitats, then this broader, more inclusive approach may be considered desirable.

## References

British Trust for Ornithology (BTO) - <https://www.bto.org/understanding-birds/birdfacts/skylark>

Game & Wildlife Conservation Trust - <https://www.gwct.org.uk/farming/big-farmland-bird-count/farmland-birds-to-count/skylark/>

Royal Society for the Protection of Birds [https://www.rspb.org.uk/about-the-rspb/about-us/media-centre/press-releases/new-report-reveals-huge-declines-in-europes-](https://www.rspb.org.uk/about-the-rspb/about-us/media-centre/press-releases/new-report-reveals-huge-declines-in-europes-birds/?fbclid=IwAR0Dn48mrXy4NolviQ9gKDsrgrfRpV5paWkVsl-YSFOR4h4NnG22FG7JBHvE#:~:text=A%20new%20study%20on%20breeding,million%20breedin)

[birds/?fbclid=IwAR0Dn48mrXy4NolviQ9gKDsrgrfRpV5paWkVsl-](https://www.rspb.org.uk/about-the-rspb/about-us/media-centre/press-releases/new-report-reveals-huge-declines-in-europes-birds/?fbclid=IwAR0Dn48mrXy4NolviQ9gKDsrgrfRpV5paWkVsl-YSFOR4h4NnG22FG7JBHvE#:~:text=A%20new%20study%20on%20breeding,million%20breedin)

[YSFOR4h4NnG22FG7JBHvE#:~:text=A%20new%20study%20on%20breeding,million%20breedin](https://www.rspb.org.uk/about-the-rspb/about-us/media-centre/press-releases/new-report-reveals-huge-declines-in-europes-birds/?fbclid=IwAR0Dn48mrXy4NolviQ9gKDsrgrfRpV5paWkVsl-YSFOR4h4NnG22FG7JBHvE#:~:text=A%20new%20study%20on%20breeding,million%20breedin)  
[g%20birds%20since%201980.&text=It%20has%20lost%2050%25%20of,total%20of%20247%20](https://www.rspb.org.uk/about-the-rspb/about-us/media-centre/press-releases/new-report-reveals-huge-declines-in-europes-birds/?fbclid=IwAR0Dn48mrXy4NolviQ9gKDsrgrfRpV5paWkVsl-YSFOR4h4NnG22FG7JBHvE#:~:text=A%20new%20study%20on%20breeding,million%20breedin)  
[million%20birds](https://www.rspb.org.uk/about-the-rspb/about-us/media-centre/press-releases/new-report-reveals-huge-declines-in-europes-birds/?fbclid=IwAR0Dn48mrXy4NolviQ9gKDsrgrfRpV5paWkVsl-YSFOR4h4NnG22FG7JBHvE#:~:text=A%20new%20study%20on%20breeding,million%20breedin)

Stroud Valleys Project 2021 Rodborough Common Survey Report

<https://static1.squarespace.com/static/607bc3d09f6f9a4d161b5da2/t/616ed0e7817ecd546af5bd42/1634652394061/Stroud+Valleys+Project+Rodborough+Common+Surveys+Report+2021.pdf>

The Met Office

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