



Lewes Swift Supporters Annual Report for 2022

Based upon contributions from members of the LSS Committee and surveyors:

Mike Ramsey (Chair, Acting Treasurer to September 2021 and Surveyor)

Audrey Jarvis (Secretary, Communications Officer, and Surveyor)

Kevin Murphy (Recorder and Surveyor)

Sharon Hall (Treasurer)

Crispin Holloway (Founder Member of LSS)

Emma Allen (Surveyor)

And the additional surveyors:

Mary Hempshall, Nick Jarvis, Carina Morrissey, Lubna Zaidi, Susie O'Hare, Steve Neylon

And Swift sightings reported by 64 of our members via social media

Summary

This report summarises the key achievements of Lewes Swift Supporters, (LSS), during the fourth year of operation, since our relaunch in May 2019. It reports the results of the survey that were primarily used to estimate the current numbers of Swifts nesting in Lewes, but which had a slightly different survey design from that used in previous years. The total number of 79 active Swift nest entrance holes were recorded, from a total number of 2031 Swift sightings. Rigorous comparison of this total number of 'nests' with earlier years is constrained by differences in the survey area and the methodology, and by a lack of systematic survey results prior to 2019. However, for the six Swift colonies where we do have results from 2000, the number of nesting pairs was down in total by 48% (from 54 to 28) on the numbers reported in 2000. This decline is broadly consistent with the reported UK national decline of 55% between 2000 and 2019¹, and 59% decline in Sussex from 2000 to 2021². Lewes residents participated extensively in their contributions to the LSS survey via our website³ and social media, (e.g., 212 contributions, mainly via our Facebook group). Supporters were also kept informed of LSS activities via three LSS Newsletters⁴, and through social media interactions. Real-world activities of LSS recommenced post-Covid with activities including three Swift walks in July and a well-attended AGM in September 2022. Other activities of LSS have included advising on or implementing the installation of 129 new Swift boxes since 2020, potentially providing accommodation for 167 pairs of Swifts.

¹ ** <https://app.bto.org/birdtrends/species.jsp?year=2020&s=swift>

² Helen Crabtree (BBS Organiser & BTO Representative for Sussex), personal communication, July 2022

³ <https://e-voice.org.uk/lewesswiftsupporters/>

⁴ <https://e-voice.org.uk/lewesswiftsupporters/newsletters/>

1. *Brief introduction to LSS*

The Lewes Swift Supporters, (LSS), is an organisation of volunteers that was formed in 2015 with support from Sussex Ornithological Society (SOS) and Sussex Wildlife Trust (SWT). It was relaunched in May 2019, with the following aims and objectives:

- 1.1 To increase the number of Swifts nesting in Lewes and the surrounding area through providing and encouraging more Swift nesting.
- 1.2 To increase people's awareness and knowledge of Swifts through education and engagement.
- 1.3 To provide opportunities for local people to get actively involved in, appreciate, and be educated about their local Swifts.

2. *Annual Swift Survey*

In order to pursue our first objective, LSS has conducted a survey of the Swift population in Lewes in 2022, as it did in the three previous years. The results of these earlier years' surveys were reported in previous LSS Annual Reports¹. The most robust and useful indicator is the number of entrance holes in buildings seen to be used repeatedly by Swifts, generally and loosely referred to here as the number of 'nests'.

2.1 *Methods employed*

The survey methods employed in 2022 used sightings from both systematic and casual surveys were modified from those used in the previous years in order to improve the accuracy of the estimated number of nests. All of the results were logged by the LSS Recorder, and are now being entered into the national and international database BirdTrack, which is hosted by the British Trust for Ornithology (BTO).

2.2 *Systematic Survey*

For ease of use, LSS redesigned the areas covered by the systematic survey of Swifts in 2022 to be bounded by roads, rather than as rectangles of equal size (Fig 1a). The total number of survey areas was reduced down from the ten areas surveyed in 2021 (Fig 1b) to six areas in 2022 to focus on the areas where breeding was detected in 2021. The three areas that were excluded in 2022 were Cliffe (6), the Nevill (7), Eastern Malling (10), and the fourth previous area of East Southover (5) was combined with West Southover (4) to make a new combined area of Southover (4) in 2022 (Fig 1a).

Implementation of the new survey design was enabled by the welcome addition of 3 new surveyors. The surveyors were each allocated to an area and asked to survey that area at least twice a month, when possible, for the three-month period from May to July, while the Swifts are in Lewes. The timing of each survey was still for a period between approximately 7.30pm and 9.30pm or dusk. The general survey design, surveyor instructions (identical to those used in 2021, Appendix A) and reporting forms (Appendix B) used by each surveyor, were slightly modified from those used in 2021. The instructions contain a description of the types of Swift activity that were to be reported (e.g., low-flying party or banging), and those to be excluded (i.e., high-flying Swifts above twice house height, as these are not necessarily local birds).

¹ <https://e-voice.org.uk/lewesswiftsupporters/lss-annual-reports/>



Figure 1. Design of systematic survey of Swifts in Lewes used in (a) 2022, organised into six areas. This has been reduced and reorganised from (b) the ten survey areas that were used in 2021, by the removal of three areas where breeding was not detected in 2021 which were Cliffe (6), the Nevill Estate (7), Eastern Malling (10). There has also been an amalgamation of the previous areas (4) and (5) into a new combined area (4) in 2022.

2.3. Casual sightings

Casual sightings of Swifts were made across the whole of Lewes, including extra visits to the areas covered by the systematic survey, and to other areas. These reports were partially

made by the surveyors, using LSS Reporting forms. A substantial number of 212 further casual reports were also made by other Supporters and the general public, as part of Lewes Swift Watch project, through Facebook, our LSS webpage, Twitter, and email. LSS are very grateful to all of those people who submitted sightings, and all the reports with sufficient detail have been included in the main database (Appendix C).

Address	Nests*			
	2019	2020	2021	2022
St Anne's Church, High Street	8	19	12	6
█ Western Road	5	8	6	9
The Maltings, Castle Precincts	1	4	8	8
Flea Market, Market Street			7	7
█ High Street	2	3	5	4
█ Station Street	2	3	5	8
█ St Martin's Lane	2	3	3	6
█ King Henry's Road	2	3	3	1
█ Market Lane	1	2	4	1
█ Valence Road	3	2	4	3
█ Old Malling Way		2		1
█ (next to █) Potters Lane			2	2
█ Southover High Street (Anne of Cleves House)	2	1	2	1
█ Southover High Street			1	2
█ Southover High Street		1	1	1
█ Western Road			1	1
█ High Street			1	1
█ High Street	2	1	1	1
█ Gallows Bank, Abinger Place	1	1	1	3
█ Grange Road	1	1	1	1
█ De Montford Road	1	1	1	1
█ De Montford Road		1	1	1
█ The Avenue			1	2
█ The Avenue				1
█ The Avenue	1	1		
█ The Avenue			1	1
█ The Avenue		1	1	1
█ Bridgewick Close		1		
█ Bridgewick Close		1		
█ Bridgewick Close		1	1	

█ Bridgewick Close		1	1	
█ Bridgewick Close		2	1	1
█ Lambert Place				1
█ Prince Edwards Rd				1
█ Potters Lane				2
Total number of 'nests'	34	64	76	79
Total number of buildings with nests	15	24	27	30
Average number of nests per building	2.3	2.7	2.8	2.6

Table 1. Buildings in Lewes where the specified number of active nest hole entrances, or 'nests'*, were found in the 2022 Swift survey, with the 2019, 2020 and 2021 results for comparison. The apparent increase in total numbers of nests and buildings detected is not evidence of an increase in Swift population, as discussed below (* it was not possible to ascertain whether successful breeding took place at these locations).

2.4. Key findings

A total number of 2173 sighting of Swifts and their active nest entrances, made both in the systematic and casual observations, were reported to LSS in 2022 (Appendix C, sheet 1). A total of 79 active Swift nest hole entrances was reported in 30 buildings (summarised in Table 1, with details and photos of key sites in Appendix C, sheets 2-4).

The distribution of breeding Swifts, especially the larger colonies, is concentrated in the older areas of Lewes (Fig 2).

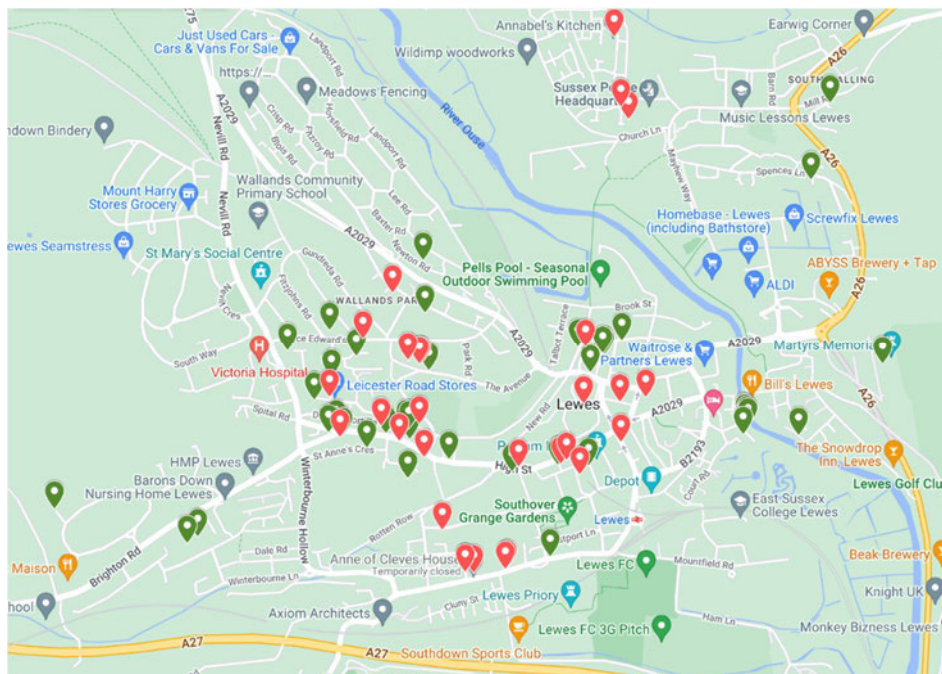


Figure 2. Distribution within Lewes of the 30 locations (📍) that were estimated to have the 79 active Swift 'nests' in 2022. Also shown (📍) are the 39 locations of 115 new nest boxes (with 149 spaces) installed with LSS involvement since 2020¹

¹ Updated 22nd Nov 2022

Comparisons between the numbers of nests reported in different years are problematic for several reasons. The obvious comparison between the 79 nests found in 2022 against the 34, 64 and 76 found in 2019, 2020, and 2021 (Table 1), apparently suggests more than a doubling in the Swift population. However, this conclusion is not reliable due to two changes in the survey methodology across these four years. Firstly, number of surveyed areas changed between years, either added, (two in 2020, a further four in 2021), or removed three in 2022. The 'new' colony discovered at the Flea Market in 2021 had 7 nests in 2022, but was detected only as the result of setting up a new survey area (Area 3 on Fig 1b). It is possible that this colony existed in 2019 and 2020 but remained undetected. The second change was in the variable and generally increasing number of sightings recorded in 2022 (2031, compared to 2038 in 2021, 1843 in 2020 and 150 in 2019). A consequence of these changes has undoubtedly led to an increase in the number of sites identified, and the number of nests detected at some of these sites. The extra information gained from the increased survey effort in 2021 made a very valuable contribution to our understanding of these Swift colonies, largely confirmed in 2022. However, it has had the unintended consequence of making the detection of changes in population size more challenging.

Overall, therefore, the results of the systematic surveys made over just four years (2019, 2020, 2021 and 2022) are not sufficient to draw and reliable conclusions about any possible changes in the size of the Swift population in Lewes over this period. The application of the same survey methodology over the same area for the whole breeding season, for a much longer period (e.g., in excess of ten years) will be required to clarify the longer-term trend in the Swift population of Lewes. This trend is currently also obscured by the year-to-year variations that are common in such small populations, and partially caused by uncertainty arising from the inevitable limitations in the survey methodology.

Comparison of the 2022 results against a survey that was recorded prior to 2019 are also problematic. This is because the few earlier surveys did not aim to survey the whole of Lewes, but only focused on a small number of colonies. However, a comparison for a limited number of locations can be attempted. One focussed and a non-systematic survey of Swifts in Lewes that was made in 2000 by Mike Helps¹.

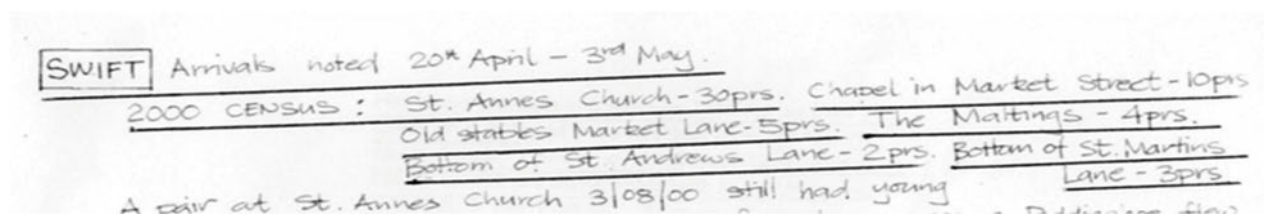


Figure 3. Extract from the publication by Mike Helps in 2004¹ showing the handwritten results of his survey of the arrivals of Swifts at key sites in Lewes from 20th April to 3rd May 2000, used as the source for the comparison in Table 2.

¹ Mike Helps (2004) 'Lewes Landscapes and Bird' (Private Publication, copies in Lewes Library)

Nests found in years: Swift colony location	2000 ³	2019	2020	2021	2022
St Anne's Church	30	8	19	12	6
██████ in Market Lane	5	1	2	4	1
The Maltings	4	1	4	8	8
Bottom of St Martin's Lane	3	2	3	3	6
Chapel in Market Street (now Flea Market)	10	ND	ND	7	7
Bottom of St Andrew's Lane	2	ND	ND	ND	ND
Total	54	12	28	34	28
Apparent decline since 2000		-78%	-48%	-37%	-48%

Table 2. Comparison of number of Swift nests at six colonies reported in the three LSS surveys (2019-2022) against those reported by Helps (2004)¹ for the year 2000. ND indicates Not Detected and is counted as a zero.

Helps reported the number of pairs of Swifts nesting in six of the colonies that existed in Lewes in the year 2000 (Figure 3 and Table 2). The discovery by LSS in 2021 of the colony in the Flea Market, was partially enabled by this report by Helps in 2000 of 10 pairs nesting in the then Chapel in Market Street. The comparison (Table 2), shows that five of these six colonies reported by Helps still exist in 2021, but the one at the bottom of St Andrew's Lane has apparently not survived. The original total of 54 nests in these six colonies has reduced to 28 nests in 2022, suggesting a 48% decline (Table 2). This compares with an apparent decline of 78% at these same colonies found in 2019, 48% in 2020 and 37% in 2021. All four of these estimates of decline give a very approximate indication of the scale of the general decline in the breeding population in Lewes, and are in rough agreement with the UK national picture of a 53% decline between 2000 and 2019¹ (Fig 3), and also the more local situation in Sussex of approximately 59% decline 2000 to 2021² (Fig 4). However, all of these LSS survey values suffer from the same limitations that were discussed above, about differences in the effectiveness and comparability of the survey techniques across the years, and how representative this small number of colonies might be.

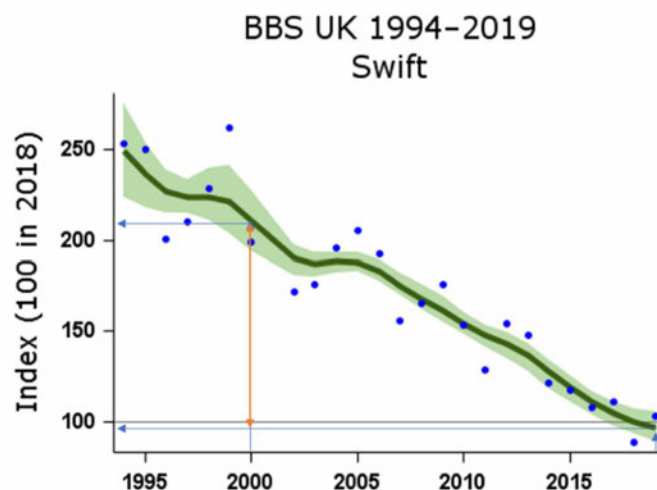


Fig 3. National UK fall in Swift population², showing 53% decline 2000 to 2019 (Index 210 to 98)

¹ <https://app.bto.org/birdtrends/species.jsp?year=2020&s=swift>

² Helen Crabtree (BBS Organiser & BTO Representative for Sussex), personal communication, July 2022

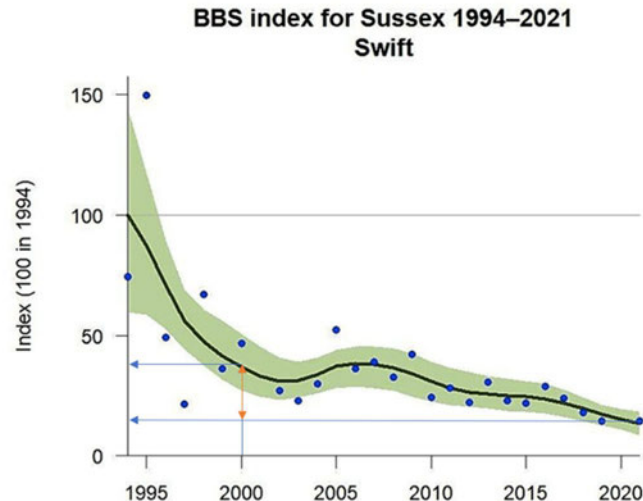


Fig 4. BBS Survey results for Sussex³ from which a 59% decline 2000 to 2021 (Index 37 to 15) has been extracted, which is similar to the decline in Lewes of around 48% in 2000 to 2022.

Records of earlier changes in Swift populations from 1970 to 2000 come from a report by Roberts.¹ This already shows a 24% decline in Sussex from 1871 to 1439 low flying Swifts at breeding sites in June, not nests), and a 34% decline for Lewes over that same period from 140 to 93 (93 being the average of 75 in 1999 and 110 in 2000). Although this methodology is useful to detect change over that period, it is difficult to compare the actual numbers of birds reported by Roberts to the number of nests counted in the more recent LSS surveys. Such comparisons are made effectively impossible by the conclusion in the report from other studies that ‘populations can be under-estimated by up to 70 % from counts of low flying birds’.

2.4.1 Swallows and House Martins in Sussex and Lewes

It is interesting to consider a broader perspective that includes other UK visitors which also gather insects on the wing in a similar way to Swifts. Comparative results from this same BBS survey of Sussex also show serious declines in numbers from 2000 to 2021 of a slightly smaller 36% for Swallows, but and even worse 80% for House Martins. LSS has therefore decided to also record the locations of the nests of Swallows and House Martins in Lewes, from 2023.

2.5. Review of the survey designs used 2019 to 2022, and implications for design in 2023

The alterations made to the survey design between years have the potential advantage of improving the way that LSS can achieve some of its objectives. However, the alterations have the disadvantage of making the findings of the survey less comparable from year to year. It is therefore prudent to review the effects of these alterations, and decide whether to retain them and whether further changes are justified. Each aspect of previous survey design alteration will be reviewed in turn.

¹ Graham C.M. Roberts. The 1999-2000 Sussex Breeding Swift Survey, Comparison with the 1968-70 Survey and Conservation Issues. (Published in SOS Sussex Bird Report No 53 from 2000, p202-207)

2.5.1 Changing shape of survey areas (e.g., from rectangular to ones bounded by roads in 2022)

Advantages: Easier for surveyors to identify the limits of their survey areas, and to make each area of a suitable size for surveyors to survey effectively in the time available.

Disadvantages: Survey areas are not of the same size, (making them less comparable), and are not contiguous, (leaving more gaps between them).

Recommendation: Retain road-bounded areas, but leave the current shapes unchanged over the coming years to enable better comparability over time.

2.5.2 Adding or subtracting new survey areas in general

Advantages

2.5.2.1. Can help to locate previously unsuspected Swift nests and colonies (e.g. addition of Area 3 (School Hill) in 2021 helped find a Swift colony previously undetected by LSS).

2.5.2.2 New areas can be removed in subsequent years if no breeding is detected (e.g. Areas 6 (Cliffe), 7 (Neville) and 10 (Eastern Malling) removed in 2022 after inclusion in 2021).

Disadvantages

Makes statistically rigorous comparison of number of Swift nests between years ineffective and potentially misleading (as discussed in Section 2.4).

Recommendation

Keep the current six CORE areas unchanged in future for a stable comparison. However, additional 'speculative' survey areas could be added in future for investigation of new areas, without affecting the statistics for the six core areas. Renumber the current core areas 8 & 9 (in Fig 1a) as 5 & 6, to make clearer which are the six core areas.

2.5.3 Number of survey visits in each area.

The minimum number of visits per area by surveyors is six, as two per month for the three months May, June & July. Additional visits are made in some areas more than others.

Advantages

2.5.3.1 Additional visits can potentially detect and confirm more nesting locations, and sometimes go on to enable detection of whether breeding has been successful.

Disadvantages

2.5.3.2 Uneven numbers of visits between areas makes comparison of results between areas within one year, and between years for each area less reliable.

Recommendation

Retain the option for unlimited number of visits per area by surveyors, so as to gain the maximum amount of information about the behaviour of Swifts in Lewes.

2.5.4 Role of Casual Surveys

It is probable that undiscovered Swift nests may still exist in Lewes, for example at the rear of buildings where systematic surveyors cannot detect them. It is therefore essential to continue with the Swift Watch where Supporters and members of the public can report sightings that may reveal these previously undetected nests, as happened in 2021 at 77 High Street and at 76 Prince Edwards Road in 2022.

Recommendation: Retain and encourage casual survey reports (e.g. via Swift Watch) and consider setting up 'additional' survey areas in some years to establish whether breeding sites are present.

3. Other LSS activities in 2022

LSS conducted a number of other activities in support of our objectives.

3.1 Site visits.

Members of LSS made 20 visits to sites where occupiers or developers requested advice on the feasibility and optimal location for installing swift accommodation. This included fitting Swift boxes to existing buildings and planning to locate Swift bricks within new buildings or extensions.

3.2 Swift boxes and Swift bricks

33 new Swift boxes (23 single, 9 doubles and 1 triple) were installed on 27 buildings around Lewes in 2022, mainly with advice from LSS across Lewes (Appendix D, and all boxes installed since 2020 shown on Fig. 2). The LSS Committee identified The Avenue as the most promising focus for new Swift boxes in 2022, after considering a short list of 6 such potential areas¹. The Avenue current had three active nests in 2021, evidence of banging by young Swifts, and is also on the flight path to and from the nearby colonies at St. Anne's Church and Western Road. Three boxes were installed in general area of The Avenue, using LSS funds, and this may have helped to encourage the increase in numbers up to five Swift nests, in four buildings, which were detected there in 2022 (up from 3 in 2021, Table 1).

This year four pairs of Swifts nested in three different Swift boxes in Lewes, one being a double box. Experience in other towns suggests that it often takes several years from the installation of a Swift box or brick for it to be used for breeding by Swifts. However, there was one nest box that was installed this year that was occupied by Swifts after only one month. Swift-callers are played at many of the Swift boxes in Lewes, to draw the attention of prospecting Swifts to these locations and thereby increase the rate at which the boxes are likely to be occupied.

LSS wish to thank and acknowledge Dave Boddington for his excellent work in helping LSS to install many of the Swift boxes in Lewes in 2022.

3.3 Interaction with Supporters and General Public

Wider interaction between LSS, supporters and the general public were enabled by organisation of activities such as:

- Frequent updates to LSS website², that was set up in 2021
- LSS AGM held at the Linklater Pavilion on 6th September 2022
- Three Swift walks for Supporters on 2nd, 6th and 9th July (with 30 participants)
- LSS membership expanded to 248 people who have now given their contact details and asked to receive LSS communications (e.g., newsletters, reports)
- Published and disseminated three editions of LSS Newsletter in May, June and July³.
- Regularly updated LSS social media outlets: Facebook page, currently with 258 followers; Twitter, with 941 followers

¹ Six potential locations for the new swift-box project in 2022 [Number of Nests in 2021]: High Street & St Martin's Lane [10], The Maltings [8], Flea Market [7], Southover High Street & Potter's Lane [6], The Avenue [3], Bridgewick Close [3]

² <https://e-voice.org.uk/lewesswiftsupporters/>

³ <https://e-voice.org.uk/lewesswiftsupporters/newsletters/>

- Numerous posts of LSS information on Facebook and Twitter, including 212 reports of Swift sightings from our Facebook group members within the Lewes Swift Watch project.
- Sales of second batch of LSS badges to raise funds to buy and install more nest boxes.
- Information stall at St. Anne's Church as part of Green Church "Ride and Stride" , 10th September.
- Talk via Zoom for members of Friends of Lewes on 20th September.
- LSS information postcards or letters distributed to 80 selected houses.

3.4. Interactions with external bodies

LSS has been maintaining active links with Lewes Town Council (LTC), Lewes and Eastbourne District Council (L&EDC), and the South Downs National Park (SDNP) in order to embed advice on providing Swift accommodation into the consideration of suitable Planning Applications. The leaflet written by LSS on this subject by LSS¹, and adopted by LTC and submitted to L&EDC and SDNP, continues to be used. LSS has also contributed recommendations for the inclusion of Swift accommodation on individual planning applications. LSS maintains its interactions with related external bodies such as Sussex Ornithological Society, Sussex Wildlife Trust, British Trust for Ornithology, Royal Society for the Protection of Birds, and Swift Conservation².

LSS is still affiliated with Lewes Climate Hub, and has participated in some events organised by them.

Funding for the purchase and installation of multiple Swift boxes at strategically important locations, was applied for and secured for LSS using kind donations made by Supporters and members of the public.

A recent successful bid for funding for LSS was made as part of an Ouse Valley Climate Action grant application, jointly with several community groups of volunteers in Lewes. The grant of £780 to LSS is aimed at funding (1) the purchase and installation of 10 single Peak boxes, (2) postcards/leaflets, and (3) hire of a venue for events or activities.

Funding has also been received through residents choosing LSS as their "good cause" in the LDC Local Lottery, (<https://www.leweslocallottery.co.uk/support/lewes-swift-supporters>), and residents giving us generous donations.

4. Recommendations for future work

The experience and findings from the operation of LSS in 2022 are being used to plan improvements for 2023. These included:

- Review the optimal design for the Swift Survey for 2023, and long-term surveying strategy (as discussed in Section 2.5). Decide whether to survey any new areas, identified from casual sightings
- Record the locations of the nests of Swallows and House Martins in Lewes.
- Review the number and training of any new surveyors required to cover the systematic survey areas.
- Implement a further project to install multiple Swift boxes around a different existing colony in Lewes.

¹ LSS leaflet for LTC: Consideration of Swift Accommodation when Considering a Planning Application. Available at <https://protect-eu.mimecast.com/s/GnrOC9gLITZRBx2so7owp?domain=e-voice.org.uk/>

² <https://www.swift-conservation.org>

5. Conclusions

In 2022 Lewes Swift Supporters successfully conducted the fourth systematic survey of the Swift population of Lewes. From a total of 2031 reported sightings, LSS has estimated that there are 79 active 'nests' (i.e., hole entrances recorded as being used repeatedly by Swifts). This is an apparent increase of 15 on the 64 nests located in the 2020 survey (and 3 on the 76 in 2021), but this is not considered to be conclusive evidence of an increase in the size of the Swift population in Lewes but is probably due to changes in the survey methodology since 2020. Comparison with a limited survey of six Swift colonies recorded in 2000, suggests around a 48 % decrease in Swifts nesting in Lewes since that time, which is not significantly different from the estimated national decline over a similar period.

6. Appendices

Copies of this report, and the LSS Annual Reports for 2019, 2020 and 2021, are published on the LSS Website¹. The following appendices are available by request from the LSS Secretary, contacted via lewesswifts@gmail.com

- A. Survey Instructions for LSS Surveyors 2022
 - a. Lewes Swift Survey 2020, 2021 and 2022– methodology (Annual Report).pdf
- B. Survey Reporting Forms for LSS Surveyors 2022
 - a. Lewes Swift Survey 2022- recording form (Annual Report).pdf
 - b. Lewes Nest Activity Log 2022 (Annual Report).pdf
- C. List of all Swift sightings reported in 2022
 - LSS Survey 2022-locked +pictures (Annual Report).xlsx
- D. New Swift Boxes
 - New Lewes Swift Boxes_2022 (Annual Report).xlsx



A Swift circling St. Anne's Church, by Barry Griffin

¹ <https://e-voice.org.uk/lewesswiftsupporters/lss-annual-reports/>