

Future studies

The London Biodiversity Partnership, the RSPB and the British Trust for Ornithology are reviewing our current knowledge of house sparrows, identifying the gaps and planning further studies. We greatly appreciate the help that so many Londoners gave us in summer 2002 and look forward to this support for future projects.

Thank you.

The LBP House Sparrow Action Group

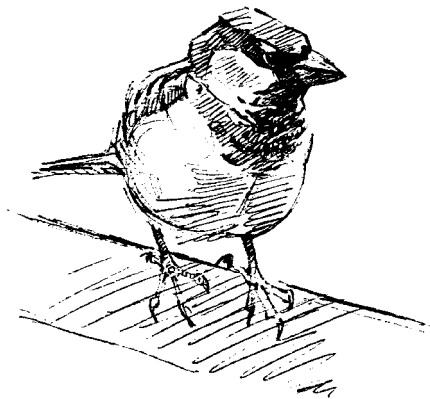
Greater London Authority, London Wildlife Trust, London Natural History Society, Birkbeck College, London Borough of Islington, City of Westminster, London Biodiversity Partnership and the RSPB.

This report was produced by the RSPB, The Lodge, Sandy, Bedfordshire SG19 2DL

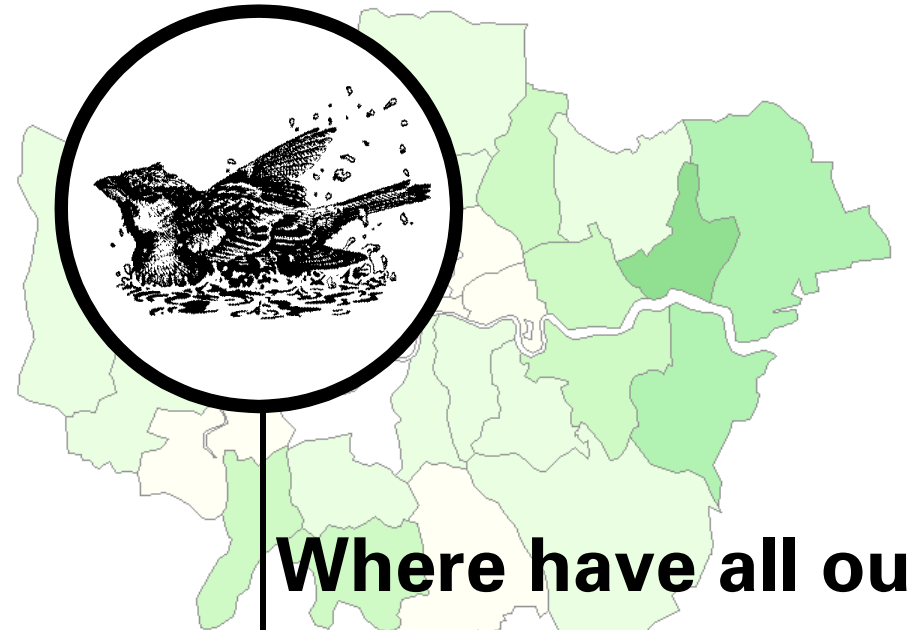
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Cover & internal illustrations of house sparrows by Mike Langman

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House sparrow by John Busby



Where have all our sparrows gone?

Survey report London, 2002

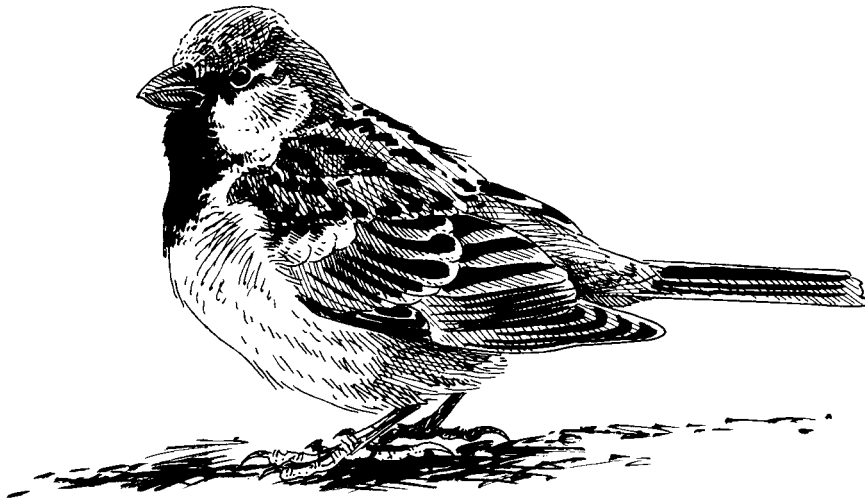


MAYOR OF LONDON

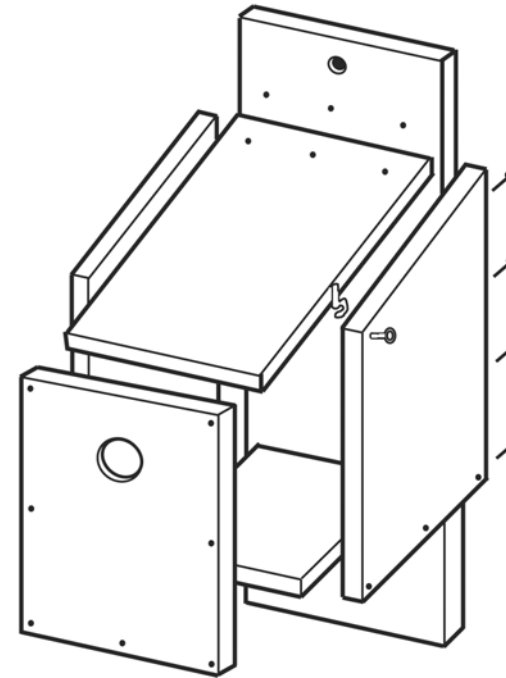


Thank you

Nearly 12,000 people filled in the survey forms on which this report is based. All the organisers of the project would like to thank them sincerely for their great response, and their concern and care for London's birds.



Rubber strip



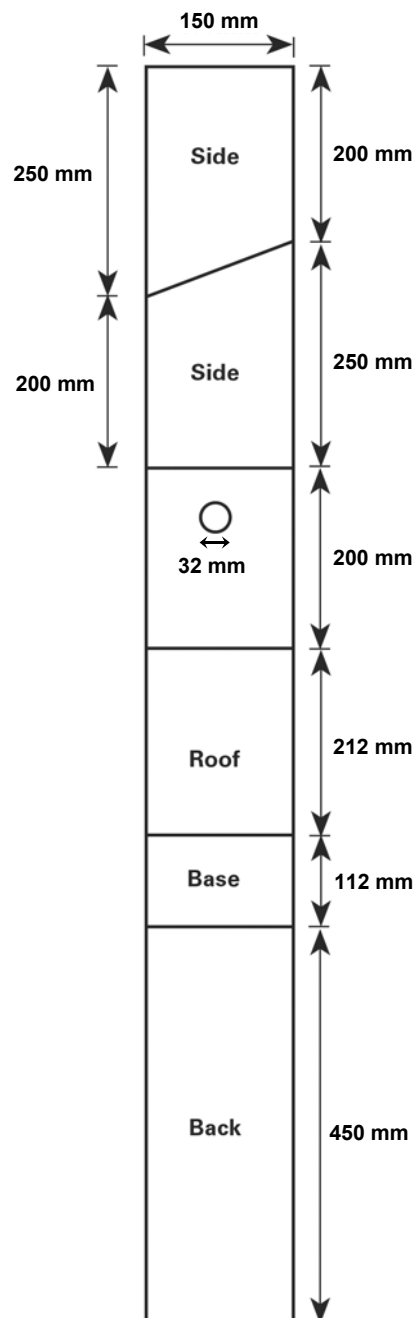
How about a nestbox?

Make a simple box for sparrows from a plank about 150 mm wide and 15 mm thick – check the diagram for details on the size of each section to be cut. The inside of the box must be at least 100 mm square and the bottom of the entrance hole must be at least 125 mm from the floor. The hole should be 32 mm wide.

Use galvanised nails or screws. Drill a drainage hole in the base. Hinge the lid with a strip of leather or rubber (an old piece of bicycle inner tube is fine), and use a good catch to fasten it: you will want to clean the box out in the

autumn. Treat softwood boxes with water-based preservatives, such as Sadolin, applying only to the outside of the box, and not around the entrance hole. Let the box dry and air thoroughly before putting it up.

Sparrows are sociable birds, so you could put up more than one box, spaced a few metres apart. The box should be placed high enough to be out of the reach of cats and people. Sparrows traditionally nest under the eaves, so this would be a natural place to put your nestbox. It is best facing between north and east, thus avoiding strong sunlight and the wettest winds.



Regular feeding in winter helps birds through the hardest times, and keeps adult birds in better condition to cope with bringing up their young in the summer. Birds also need clean water for drinking, and for bathing – an important part of feather care.

You could make your garden – or other green space – more wildlife-friendly. Not using pesticides and going organic is a good start; this will improve the variety of plants and animals. Sparrows eat the seeds of many cultivated and wild plants – let flowers go to seed for the birds. They need to find great quantities of aphids, caterpillars and other invertebrates to raise their families. In choosing which plants to grow, consider their attraction to insects, and provision of seeds and berries. Trees, shrubs and hedges supply cover and a safe passage from place to place. There is plenty of advice available in books and from conservation bodies, such as the RSPB.

Sparrows will roost at night, and socialise during the day, in sheltered places such as ivy-covered walls, and dense trees. Even in the centre of London, there is room for green walls or rooftop gardens, pleasant for people and good for wildlife. Nestboxes may be used for roosting as well as nesting.

The survey in brief

- Nearly 12,000 people filled in 'Where have all our sparrows gone?' survey forms between 18 June and 19 July 2002, helping the London Biodiversity Partnership to learn more about house sparrows in Greater London
- They provided information about house sparrows at 9,172 homes and 3,698 other places in London – a great response and the biggest ever participation in a study of a single bird species in the capital
- Reports of the highest number seen at one time in each site totalled 74,862 sparrows, just a sample of the whole population
- Maps of the presence of house sparrows reported from each borough show that they were more common in outer areas than in the City and West End
- House sparrows were noted at 73% of participants' homes, varying from 94% in Havering, and 93% in Barking and Dagenham, to 30% in Camden, and 17% in Westminster
- The highest mean number of sparrows per home was 12 in Barking and Dagenham; the lowest was 1 or 2 in Kensington and Chelsea, and Westminster
- 32% of forms reported sparrows nesting, mostly in bushes and hedges – 38% of nests, and in roofs – 36%
- House sparrows were more likely to nest in homes built before 1945 than in newer homes
- Sparrows are still holding on at many of London's City Farms, even in Inner London, with an average of 13 sparrows per farm
- The survey has provided much useful information and helped to raise awareness of the plight of the 'Cockney sparrer', which is now on the Red List of birds in the United Kingdom because its population has declined by more than 50% in the last 25 years
- More analysis of the results is taking place and further studies are planned. This survey will help to inspire and direct future action in London and beyond.

Why study sparrows?

The house sparrow population is declining fast, both in London and most parts of England. In London, the replacement of horse-drawn carriages by motorised vehicles, and the resulting loss of spilled cereal as food for sparrows, is thought to have contributed to a drop in numbers during the first half of the last century. The downward trend has continued, becoming especially severe during the 1990s. Between 1994 and 2000, the Breeding Bird Survey (run by the British Trust for Ornithology, the Joint Nature Conservation Committee and the RSPB) recorded a fall of 59% in house sparrow numbers at sites in London. This year, because numbers nationally have fallen by more than half in the last 25 years, the house sparrow was placed on the 'Red List' of British birds, the species of highest conservation concern. It may still be one of our more common and widespread birds, but the steep decline is puzzling and worrying.

Of all British birds, the house sparrow perhaps lives closest to people. Because it nests in our houses and accepts food from us, people generally treat it with affection, as a friendly, chirpy character. We are concerned to see a familiar bird disappearing, and it raises questions about the quality of our shared environment.

To find the best ways of trying to restore the sparrows' fortunes, we need to know more about what is really happening and to identify the causes of the decline.

The survey

The survey, 'Where have all our sparrows gone?', was carried out as part of the Species Action Plan for house sparrows in the London Biodiversity Action Plan. The Action Plan for sparrows is led by the Mayor of London. We thank Awards for All, through London Wildlife Trust, for helping to fund the survey and report, and London Natural History Society for a donation.

The RSPB provided a large part of the funding and material support, and the project was overseen by its London Sparrow Officer Keith Noble, and Dr Mark Eaton, who analysed and produced the results reported here. Survey forms were distributed to members of participating organisations,

Allotments were also good, with an average of 6.9 sparrows, while parks, school playing fields, church grounds and cemeteries, garden squares and even wildlife reserves averaged only around four or five sparrows.

Some studies seem to indicate that house sparrows can have trouble finding enough food, such as insects to feed young and seeds for young that have fledged. City farms will tend to have grain lying around from the leftovers of farm animals, as well as rough weedy patches with an abundance of naturally seeding herbs. Allotments, too, can be good foraging habitat. The poorest category of site was workplace, with sparrows present at just over half and an average of only three birds. A wide variety of other places had sparrows, including golf courses, riverbanks and towpaths, airports, market places, tennis clubs and even a dry ski slope.

Some conclusions

This survey has told us many things about house sparrows in London. It has confirmed our suspicions that sparrows are scarce in central areas; numbers are higher in outer London, especially in the east. Gardens where bird food is put out are more likely to have sparrows, and more of them, although we cannot be sure that this is a direct effect of the food being provided. Sparrows in London are most often found nesting in bushes/shrubs and in roofs; nesting in the dwelling itself is slightly more frequent in older buildings. They are also found in a wide variety of habitats away from homes, with city farms and allotments being good 'refuges'.

What can people do to help sparrows?

While conservationists are trying to pin down and address the chief reasons for the decline of our house sparrow population, most people can take some action to help sparrows and other wildlife. Providing food, water, cover and breeding sites could make a difference.

Suitable food for sparrows includes seeds and grains, and products made from them, such as bread and pastry. A range of different seed mixes and feeders to hold them is now widely available. Moisten dry bread before feeding – crumbling it up during the breeding season. Oatmeal mixed with melted fat left from cooking is popular with birds.

There was a slight difference in the choice of sparrow nest site according to the age of the property where they were breeding. Sparrows recorded at older buildings were more likely to breed in the building itself (either in the roof, a hole in the wall or in the chimney) than those at younger properties (figure 6).

So it is possible that house sparrows may prefer to nest in homes, in the holes, nooks and crannies they find, because they do so more frequently in the (older) homes where more of these spaces are available.

Where else did people see house sparrows in London?

Many people also gave us information on sparrows they had seen away from home; somewhere in London that they had visited during the survey period. Of the 3,698 other places people told us about, sparrows were seen at 74% and nests were reported at 12.1%.

Sparrows are still holding on at many of London’s city farms, even in Inner London, with an average of 13 sparrows per farm. The Mudchute City Farm in the Isle of Dogs held up to 50 sparrows – one of the largest counts in the survey.

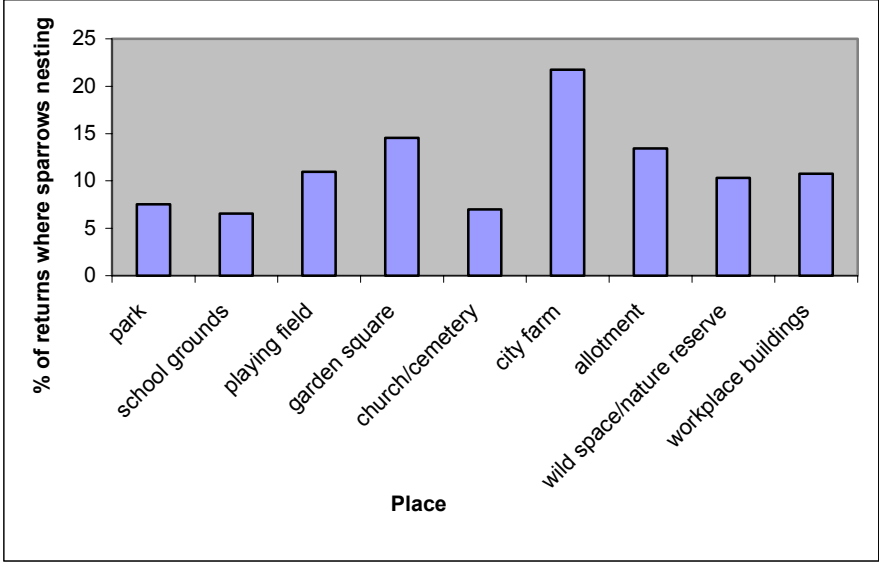


Figure 7. Occurrence of nesting sparrows away from homes

and to the public through libraries, museums, information offices and many other outlets. The form could also be completed on participating websites. The survey attracted plenty of attention from the media, not only in London but as far as Australia, America and South Africa. We greatly appreciate the support of everybody who made this a truly popular project.

The results

Responses

We received 11,805 survey responses. Many were from people living outside London who were keen to tell us about the sparrows where they live – sadly we are unable to use these replies in this report, but we hope to be able to look at house sparrows across the UK in the near future.

In London, we had 9,172 reports from homes and 3,698 from other places where people had looked during the survey period – 18 June and 19 July 2002.

Where are the sparrows?

House sparrows were seen at 73% of participants’ homes. In all, 56,483 sparrows were reported from homes, with a further 18,379 reported from the other places away from homes – a combined total of 74,862. The average count of sparrows per home was 6.2 birds.

Although sparrows were found at 73% of participants’ homes in London as a whole, there was considerable variation in occurrence between different regions. The best boroughs were in the east of London. House sparrows were present at 94% of homes in Havering, and 93% in Barking and Dagenham*. Conversely, sparrows were very scarce in central areas, with the City of Westminster being the poorest borough – sparrows were seen at only 17% of participants’ homes.

* Footnote: all references to areas of London refer to the appropriate London Borough

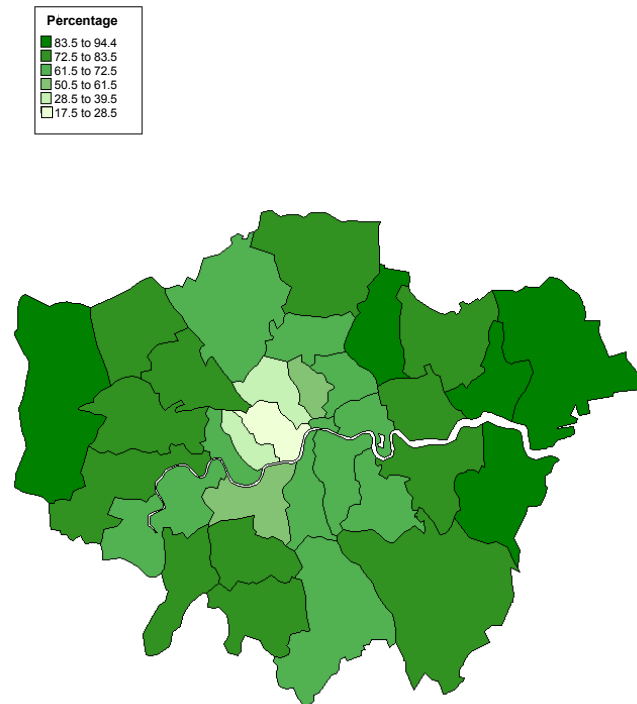


Figure 1. Map showing the percentage of homes where sparrows were present

The Figure 1 map, which shows for each borough the percentage of homes where sparrows were reported present, clearly reveals this pattern. It illustrates how scarce sparrows are in the heart of the capital.

As well as being found at more homes in outer London, house sparrows were also found in greater numbers at these homes – a mean of 6.7 sparrows per home in outer London compared to 4.3 in inner London*. The next map shows the number of sparrows per home at a finer scale – each square is 2 km x 2 km tetrads – with the lighter colours in central areas indicating fewer birds. Eastern areas were best; there was an average of nearly 13 birds per home in Barking and Dagenham.

*Footnote: In this report ‘inner London’ is defined as including the London Boroughs of Hammersmith and Fulham, Kensington and Chelsea, City of Westminster, Camden, Haringey, Islington, City of London,

suggested that houses built recently are less likely to provide such opportunities for nesting, and this could be making life harder for sparrows. Participants were asked to give the age of the property they were reporting from, in five age bands, so we could investigate the effect of house age on whether sparrows nested, and if so where they chose to nest.

The percentage of homes where sparrows were seen, the number seen, and the percentage of homes where they nested all varied between different home age categories. The average number of sparrows seen was greatest in homes built between 1919 and 1944 (Figure 5).

The low numbers recorded in older properties built before 1919 is a slightly surprising result. This result might be due to variation in the surroundings of these buildings, rather than the suitability of the building themselves for sparrows: perhaps, for example, pre-1919 buildings tend to have smaller gardens or less surrounding green space. We are planning further analysis to investigate this.

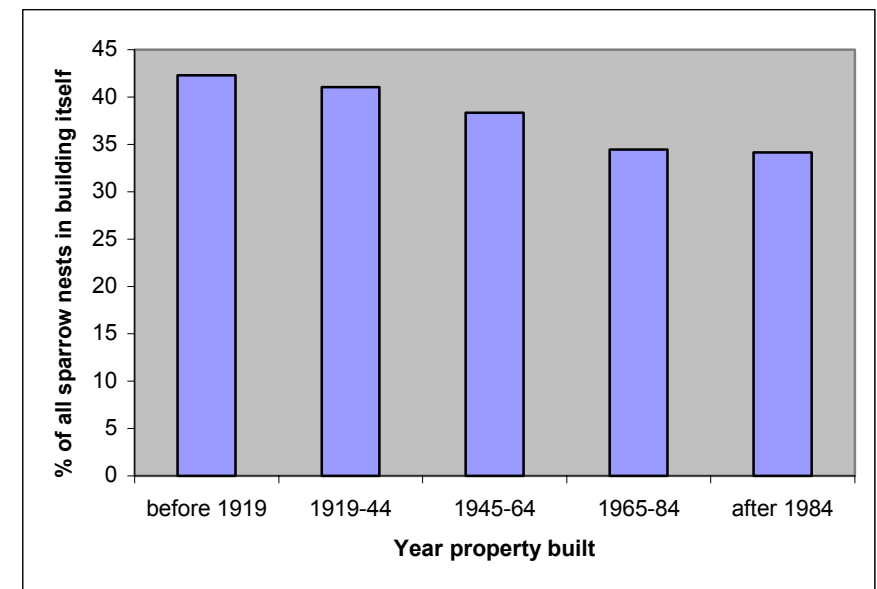


Figure 6. Effect of building age on proportion of sparrows nesting within

There were differences between London boroughs in the nesting sites chosen by sparrows. For example, half of all nests reported from Barking and Dagenham were in roofs, whereas in Camden less than a quarter were in roofs. It seems likely that local differences, for example in the type of housing stock, will affect where sparrows nest. There was no general pattern in the choice of house sparrow nesting sites across London, with, for example, no difference in the proportion of birds using 'artificial' sites (roofs, chimneys, hole in walls, outbuildings and nestboxes) as opposed to natural sites (ivy, bushes) between inner and outer London. Only in the choice of two categories of nest site was there a real difference between inner and outer London – sparrows were more likely to be found nesting in ivy (or other creepers) and in holes in walls in inner London than in outer London.

The effect of house age on house sparrow nesting sites

As the results above show, a significant proportion of London house sparrows nest in 'artificial' sites such as chimneys and roofs, by finding holes, nooks and crannies in houses and other buildings. It has been

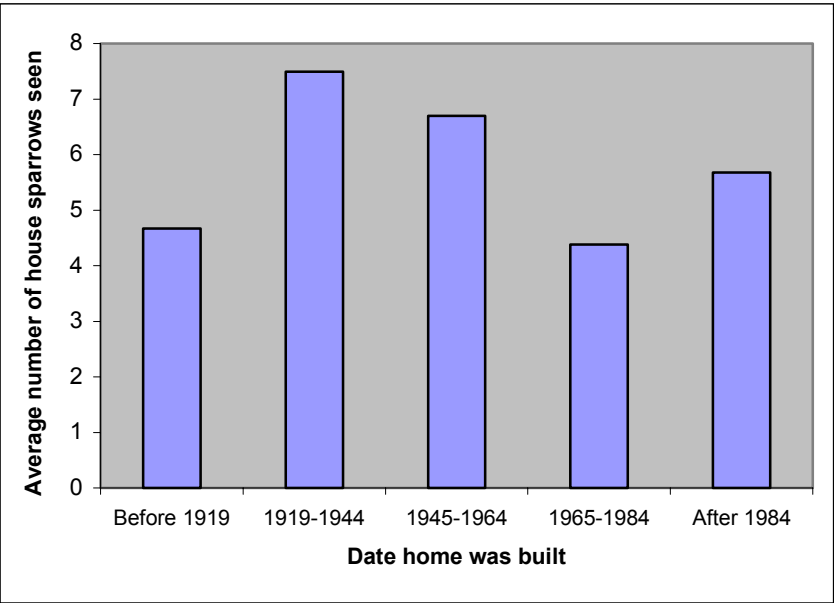


Figure 5. Average number of house sparrows seen at homes of different ages

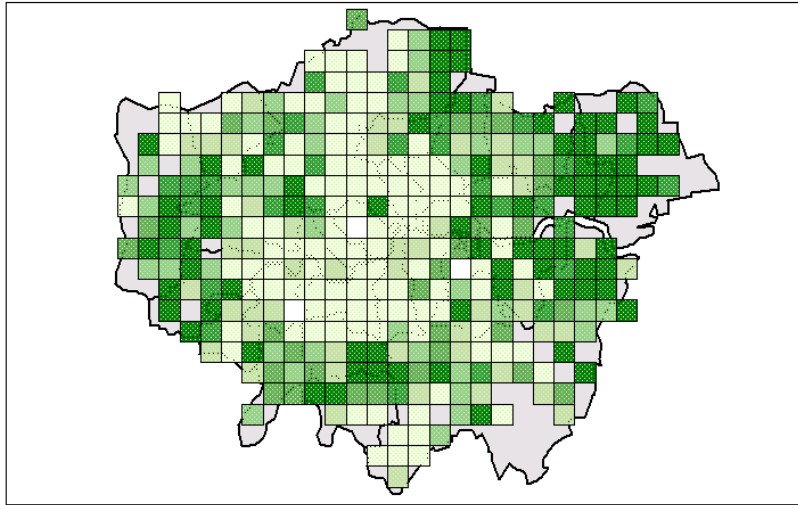
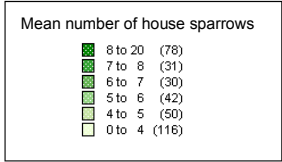


Figure 2. Map of sparrow abundance by tetrad

Hackney, Tower Hamlets, Newham, Lewisham, Southwark, Lambeth and Wandsworth. Outer London consists of the other 19 London boroughs.

How many sparrows are there?

Unfortunately, the results from our survey cannot be used to estimate the number of house sparrows in the whole of London because we do not know how representative the replies we received were of London homes as a whole. For example, it is possible that people were more likely to send a reply if they had sparrows rather than if they did not (therefore sparrows may actually be present at less than 73% of all London homes). We can be confident, however, that the total population is far in excess of the 74,862 reported, as that total came from under 3% of the homes in London.

Of those participants that had not seen sparrows at their home during the survey period, many told us when they last remembered seeing them. Most (72%) had not seen sparrows around their home for over a year, but this differed slightly between outer (78%) and inner London (70%).

This survey has provided valuable information on the whereabouts of sparrows across London. We hope to conduct detailed analysis comparing these results to environmental factors such as the availability of green space, levels of various air pollutants and housing type in an attempt to detect what may be governing the occurrence of house sparrows in London.

What about bird-feeding?

The relationship was investigated between the number of sparrows recorded and whether bird food was provided – participants were asked whether they put food out for the birds, and at what time(s) of year. Homes where food was provided had considerably more sparrows than those where no food was put out (see figure 3). This may not simply be an effect of this food attracting more of the local sparrows close to the home to feed, as these properties were also more likely to have nesting sparrows. Homes where food was only provided in the winter still had more sparrows than those where no food was provided at any time of the year, despite the fact that food was no longer being put out during the

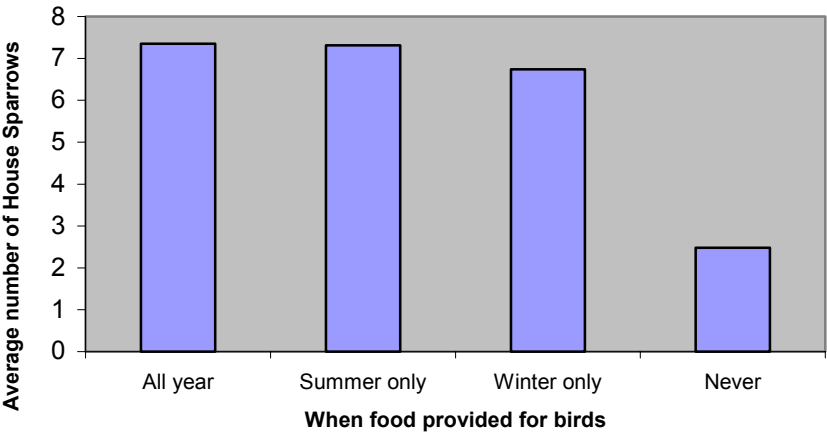


Figure 3. Average number of house sparrows at homes with different bird-feeding regimes

period of the survey. This may be due to winter-feeding increasing the number of sparrows present at a home throughout the year. However, a note of caution must be sounded about this interpretation. It may well be that people who put food out for birds have larger or more wildlife-friendly gardens (or indeed were more likely to have any sort of garden) than those who did not.

Where do London sparrows nest?

Sparrows were reported as nesting by 32% of participants. As with counts of birds, nesting was more frequent in outer London than inner London where, for example, nests were reported from only 9% of homes in both Westminster and Kensington and Chelsea.

Our survey forms asked people to tell us where sparrows were nesting, giving eight choices. By far the most common nesting sites were in bushes (38% of nests) or in roofs (36%). In reality, the proportion of sparrows nesting in roofs may be much larger, as these nests are high up and so more likely to be missed by survey participants. Ivy was also used frequently (11%) but other nesting habitats were only occasionally used. Nestboxes were used by only 1% of nesting sparrows; this low use was more likely due to the scarcity of suitable nest boxes for sparrows, rather than any unwillingness of the birds to use them.

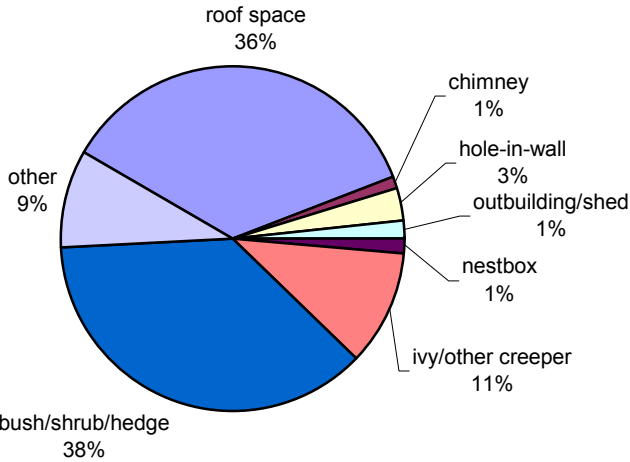


Figure 4. Choice of nest sites by house sparrows