

UK HOUSE MARTIN SURVEY 2015

FULL INSTRUCTIONS



A one-page summary of these instructions is available from www.bto.org/house-martin-resources

SECTION 1: INTRODUCTION & GETTING STARTED

The House Martin (*Delichon urbicum*) is amber-listed within the UK and is listed as of European concern following declines elsewhere in Europe.

The primary aim of this year's survey is to estimate the current UK population, using a method that is repeatable so that we can measure future changes in population size. We will also be trying to fill the gaps in our current knowledge about House Martin breeding ecology and to find out if it varies geographically.

The survey builds on a small-scale study of House Martins carried out between 2009 and 2013. It is based on randomly selected 1-km squares, which will be used to produce robust population estimates. We anticipate that there will be an additional survey in 2016, which will involve regular observation of nests over the course of the breeding season, recording details of the timing of nest activity and breeding success.

Selecting a square

To select a square, please visit the survey website (www.bto.org/house-martins). You can view all survey squares on the map and zoom in to find a square near you. Please log in or register to submit a request to cover a square, which will be sent to your BTO Regional Representative.

Once the Regional Representative confirms that the square has been allocated, this square will be listed when you log in to your survey home page.

Visit length depends on the habitats within the square and will be highly variable between different squares: some squares with only a small number of buildings may take less than half an hour to survey. If the square you have selected contains only a small number of buildings, please consider taking on one or more extra squares if any are available nearby.

Visit dates:

RECCE VISIT: mid to late May

VISIT 1: 1st to 24th June

VISIT 2: 25th June to 19th July

A second visit may not be necessary in squares where no House Martins are found. Please see the question "What if there are no House Martins in my square?" on the 'Frequently Asked Questions' page on our website (www.bto.org/volunteer-surveys/house-martin-survey/house-martin-survey-2015/faq).

You should leave **a gap of at least two weeks between Visit 1 and Visit 2.**

The nesting season is earlier in the south than the north. Where possible aim to carry out visits during the first half of each survey period if you live south of Yorkshire and Lancashire, or during the latter half of each survey period if you live in these counties or further north.

Visit times

Visits can be made at any time of day, apart from the first and last hours of daylight when birds may be roosting.

Relations with the public

As House Martins nest on buildings, you will be undertaking survey work in close proximity to private properties and recording information about birds nesting on these properties. The privacy of local residents should be respected at all times. You may need to contact householders if you find nesting House Martins, and some local residents may ask what you are doing, so an

information leaflet is available to give to members of the public (from www.bto.org/hm-resources).

Please keep to public rights of way and public access land, and seek permission if you need to access private land. Additional guidance for surveying in residential areas is available at www.bto.org/hm-resources.

We ask you not to put yourself in a position which could place you, or others, in danger. Please make sure you have read BTO's Health and Safety information for volunteers (available at <http://www.bto.org/volunteer-surveys/taking-part/health-safety>) or request a hard copy from housemartins@bto.org (01842 750050).

SECTION 2: CARRYING OUT A RECCE VISIT

A recce visit in mid to late May is recommended. This will enable you to do some of the following:

- Identify potential House Martin nesting habitat within your square.
- Carry out an initial search for the presence of House Martins and their nests.
- Contact homeowners about the survey, where appropriate.
- Seek access permission from landowners, if there are parts of your square that cannot be viewed from public roads or footpaths.

You do not need to inform all residents in your square about the survey. This would be impractical in many squares where there will be hundreds of properties. However, as most House Martins nest on private homes, some residents may understandably be concerned about the presence of strangers looking up at their homes and may ask you what you are doing. The recce visit offers a good opportunity to talk to some residents about the survey, to hand out or deliver copies of the information leaflet where appropriate, and to let people know that you will be carrying out future visits and recording information about the nests.

It is sensible and courteous to talk to any homeowners with House Martin nests on their property if you encounter them during your recce visit (or during the main survey visits), even if they do not approach you first. Although you do not necessarily need to contact every homeowner that has nesting House Martins, you should consider whether knocking on the door to discuss the survey with them is appropriate. Further guidance about when to contact homeowners is given in the guidelines for surveying in residential areas (www.bto.org/hm-resources).

In some squares, you may find House Martins around schools or other sensitive sites during your recce visit. In such cases, you should always contact the school or relevant authority before carrying out the main survey visits. Further guidance is available in the guidelines for surveying in residential areas.

Prior to the recce visit

A map of your square can be printed from the survey website and it may be helpful to plan a continuous route on your map, ensuring that you cover the whole square. You do not need to cover parts of the square that do not have any suitable nesting habitat (e.g. woodland or farmland). However, please check any isolated buildings and other structures within these habitats. The only form required for the recce visit is the 1-km square map so that you can record any colonies found during the visit. You will not need the other survey forms.

Mapping nests during the recce visit

If you find House Martin nests during the recce visit, the location of each **colony** should be marked on the map, and numbered sequentially. **For the purposes of this survey, a colony is defined as one or more nests on a single structure** (e.g. nests along a row of terraced houses should be regarded as one colony).

You should record all colonies within the 1-km square boundary, *or on buildings that are bisected by the northern or eastern boundary* of the square (even if the nests themselves are outside the 1-km square). Colonies on buildings that are bisected by the southern and western boundaries of the square should not be recorded (even if the nests are within the 1-km square)¹. Do not travel outside the 1-km square to search for additional colonies, and do not record nests on buildings that are entirely outside the 1-km square boundary, even if they can be seen from inside the square.

Notes about each colony (e.g. the house number) can also be recorded on the form to help you find the location on later visits. You may also wish to record details of any contact you have had with householders.

After completing your recce visit, the location of any colonies found can be input into the survey website. (See section 6). You will then be able to print a colony map prior to your first main survey visit, if required.

¹ An explanation of the reason for this instruction is included in the 'Frequently Asked Questions'.

Mapping unsuitable habitat during the recce visit

During the recce visit, you can also mark your map to show any areas that *do not contain any suitable habitat*. As well as areas without any buildings or similar structures, this may include urban areas where the buildings are all unsuitable, *i.e.* houses or blocks of flats that do not have any overhanging eaves or ledges under the windows. These areas do not need to be visited during the main survey visits.

However, please do not assume buildings with narrow overhangs are unsuitable, as House Martins will sometimes use such sites. *If in any doubt, you should revisit all areas with buildings during the main visit.*

Areas that are inaccessible

In some instances, parts of the 1-km square with suitable habitat may be inaccessible (*e.g.* private estates, military ranges). Many landowners will be happy to grant access permission for survey work, so please contact them wherever possible to try to arrange permission to cover these areas.

If access is refused, for safety or other reasons, and you are unable to cover 10% or more of the potentially suitable nesting habitat in the square, please record details in the Notes section on the map form.

Do I need to walk down every street?

Within some squares, to cover all suitable habitat, you may need to walk down every street. However, House Martins can usually be easily located by sound or sight when they are in the vicinity of the nest site. Therefore, in urban areas where roads are close together and parallel, it will normally be sufficient to walk down alternate roads, *unless and until birds are encountered*, in which case every road will need to be checked to look for the nests. If you do not find any House Martins during the recce visit, please ensure that you walk down the other roads during subsequent visits, so that all the roads are covered over the course of the season.

SECTION 3: CARRYING OUT THE MAIN SURVEY VISITS

Planning your visits

In most squares, a maximum of 2-3 hours will be required to cover the square. However, sites with a high proportion of residential streets may take around twice this time, especially if House Martins are present.

Wherever possible, please complete each visit within a single day. However, if necessary you can split a visit over two days in order to fully cover the square. If you choose to do this, please try to undertake the two partial visits as close together as possible, with a maximum of one week between them.

What you will need

- The map of the survey square (with colonies found during the recce visit marked and numbered).
- One copy of the *Visit Summary form*.
- One or more copies of the *Colony Information form* (several copies may be required if you found a large number of colonies during the recce visit).
- A copy of the Summary Instructions and survey codes to refer to when required (or copies of the full instructions and codes if you prefer).
- Some copies of the information leaflet and introductory letter to hand out or deliver to local residents if required.
- Binoculars may be required to check nests for signs of occupancy. The guidelines for surveying in residential areas contain advice about using binoculars.
- A compass may be useful to check the aspect (direction) of nests (some apps on your mobile phone will serve the same purpose).

Visits 1 and 2 are recorded on the same forms, so you will **not** need to print out new copies of the forms for Visit 2. The forms can be printed from the survey website. However, paper copies are also available, either from BTO HQ (housemartins@bto.org) or from your Regional Representative.

During Visit 1

Try to cover all suitable habitat in the square thoroughly. Be aware that birds may be less active and therefore more difficult to find in certain weather conditions, do not survey in heavy rain, very poor visibility or strong wind.

Make sure you check all the colonies you found during the recce visit. Record information about each colony and a count of the numbers of complete and occupied nests, on the *Colony Information form* (Section 4).

Some House Martins may build new nests from scratch in June, so you should also spend time looking for new nests in any areas containing suitable habitat, especially on suitable buildings near existing colonies. However, please check all areas of suitable habitat within the square, as new nests may be built some distance away from existing colonies.

Record and map any new colonies in the same way as previously known colonies.

During Visit 2

Re-visit any known colonies and record the numbers of complete and occupied nests on the *Colony Information form*, taking care to use the same rows as for the Visit 1 counts.

Map and number any new colonies found and record information using new rows on the *Colony Information form*.

At the end of each visit

At the end of each visit please check that you have recorded information for all known colonies on the *Colony Information form* (Section 4), and complete the visit information and estimates on the *Visit Summary form* (Section 5).

SECTION 4: COLONY INFORMATION FORM

You should record details for each colony you mark on the map, using one or more rows on this form. **For the purposes of this survey, a colony is defined as one or more nests on a single structure** (e.g. nests on a row of terraced houses should be regarded as one colony).

The colony number should be recorded in the first column, and information about the building and the location of the nest(s) in the subsequent columns. Please refer to the [Codes sheet](#) for details about these codes. A summary version of the codes sheet is also available for use in the field.

This information should be collected for any colonies that are on buildings located wholly within the 1-km square boundary, or on buildings that are bisected by the *northern* or *eastern* boundaries. All the nests on each building should be recorded, irrespective of whether the nests themselves are within the 1-km square boundary.

Nest counts

Please count the number of complete nests and the number of nests that are occupied by House Martins during each visit.

However, complete nests that are being used by another species (e.g. House Sparrow) should be excluded from both counts, as they are not available for House Martins to use.

What defines a 'Complete Nest'?

A complete nest is a nest with a fully built structure with a clear entrance hole, which is therefore ready to be used for nesting. Artificial nests are always considered as complete nests, unless they are broken. Damaged nests or nests under construction should be considered incomplete and not included in the count. Photos showing examples of complete and incomplete nests can be viewed on the Codes and Definitions document (www.bto.org/hm-resources).

What defines an 'Occupied Nest'?

An occupied nest is defined as a complete nest where you observe one (or more) of the following:

- An adult House Martin entering or leaving the nest.
- Audible young, or young House Martins peeking out of the nest.
- A pile of droppings below the nest that has clearly originated as a result of House Martins using the nest during the current breeding season.

Occupied nests should always be included in the count of complete nests, so the number of complete nests will always equal or exceed the number of occupied nests.

Please observe any colony with one or more complete nests for a short while (up to a maximum of five minutes) to watch for birds visiting the nest. However, please remember to respect the privacy of the homeowner at all times. Also be aware that your own close presence may deter House Martins from returning to their nest, so if no activity is observed it may be worth keeping an eye on the nest as you move away from it, in case any birds have been waiting for you to leave.

What should I record if all nests are incomplete?

It is valid to record a colony with a total of zero complete nests. For example, if you find a building where all nests are incomplete but under construction, this can be recorded as a colony with zero complete nests (and therefore zero occupied nests). This will ensure you remember to check the nests again during Visit 2. A zero count may also occur if nests have fallen down or been removed since a previous visit.

RECORDING A COLONY OVER MORE THAN ONE ROW ON THE FORM

What should I do if more than one answer applies to a question about the colony?

In some colonies, more than one answer could apply to some of the questions about the nests (e.g. there may be nests on two different sides of a building or a mixture of natural and artificial nests).

Where practical, please use two or more rows to record separate counts for each category. Recording the nests in this way will provide us with more robust information about the nesting preferences shown by House Martins. In the example colony on the *Colony Information form*, six complete nests were detected during Visit 1, two in a gable top facing west and four under eaves facing north. These have been input on two separate rows to record the numbers in each location. The 'Colony Notes/Details' column should be used to ensure you can easily identify each subset of the colony during Visit 2.

In some instances, it may not be practical to record separate rows for each different category. In particular, if your square has a large number of colonies, then recording each colony over more than one row may add considerably to the time needed to carry out the survey. If this is the case, it is acceptable to record each colony on a single line, and to use 'Unknown/Unspecified' as the code when more than one answer applies to a particular question.

In the example colony on the form, this would be recorded as a single row, with 'Aspect' and 'Nest location' both recorded as unknown/unspecified, and two occupied nests and six complete nests being recorded for Visit 1.

Artificial nests

If a colony has a mixture of natural nests and artificial nests, these should always be recorded as separate rows on the Colony Information form, so that the artificial and natural nests are counted separately.

Colonies with large numbers of nests (15+)

Some colonies may consist of a large number of nests (e.g. 100+ nests have been recorded on the same building). It is perfectly acceptable to split a large colony into separate rows on the form so that the number of occupied nests can be counted in blocks, even if the same codes apply to all nests. For larger colonies this will usually be the most sensible approach to follow as it will be almost impossible to watch all the nests at the same time.

If this approach is followed, you should ensure that you split the colony in such a way that you will be able to count exactly the same blocks during Visit 2, e.g. using features such as the position of windows or drainpipes on the building. Be careful not to use features that may change between visits, e.g. 'the broken nest', and make a note so that you can count exactly the same blocks next time.

Estimates of the number of adult birds seen

You can use the last two columns on the *Colony Information form* to help you estimate the number of adult birds you see in the 1-km square. These columns are for your use only and any notes made in these columns will not be input into the online system. The only figures that you will need to input into the online system will be an overall estimate for the square for each visit on the *Visit Summary form* (Section 5). This estimate should include all adult birds seen in the square, whether or not they appear to be associated with colony sites.

You should exclude any young birds seen at the entrances to nests, and if possible any fledged young. In practice, it will be extremely difficult to separate young from adults once they have fledged. Please do not worry too much about trying to do this, as the visits are timed to cover a period before large numbers of young have fledged, so a count of flying birds will usually give a reasonable estimate of the number of adult birds.

Example

I find nests on three buildings in close proximity to each other. I record these as three separate colonies and record the nest details for these colonies. I estimate that there are 10 House Martins flying around in the general vicinity of these buildings. I do not need to attempt to allocate these birds to each colony, and input '10' in the 'No. of adults' column on the *Colony Information form*.

I later see 5 House Martins in a different part of the square but am unable to find a colony site. I don't feel that it is likely they are the same birds as the 10 around the three colonies, so add '5' in the 'No. of adults' column on the *Colony Information form*.

I do not see any other birds during this visit, so my estimate on the *Visit Summary form* will be '15'.

SECTION 5: VISIT SUMMARY FORM

At the end of your visit

Please ensure that you record the visit date, visit duration and weather information (using the weather codes shown in the table below). If the conditions changed during your visit select the single category that best represents the overall conditions.

	1	2	3
Cloud:	0-33%	33-66%	66-100%
Rain:	None	Drizzle	Showers
Wind:	Calm	Light	Breezy
Visibility:	Good	Moderate	Poor

If you were unable to complete the visit in a single day, and returned on another day to complete the visit, please tick the box labelled 'Visit split over more than one day?' The visit date and weather details should be provided for the date on which you covered a larger part of the square, but visit duration and the estimates should relate to the whole of the 1-km square.

For each visit, you are also asked to make some estimates. Please try to provide your best estimate in response to each question but do not worry or spend too much time thinking about them – we are looking for 'best guess' or 'gut instinct' estimates rather than carefully calculated figures. These will help us assess whether it is likely that a large number of active nests are hidden from view. Guidance notes are given below to help you come up with quick estimates for each figure.

In areas with House Martins, what % of each building can be viewed (on average)?

This estimate will help us assess whether it is likely that a significant number of nests may have been hidden from view. **The estimate should be based only on the parts of the square where House Martins are present, rather than the whole square.**

A simple way to estimate this figure is to work out how many sides of most buildings you have been able to see, *e.g.* if most houses are detached and you have seen three sides of most buildings (the front and both sides), then you can see around 75% of each building. If the houses are long terraces and you have only seen the front, then you can see around 50% of each building. You should only consider a side of a building to be viewable if you can see enough to be able to observe nests under the eaves. In some locations it may not even be possible to view under the eaves at the front of buildings and the proportion of buildings viewable could be close to 0%.

% of square not accessible with potentially suitable nesting habitat

If you were unable to visit the whole of the 1-km square, please estimate, to the nearest 10%, the % of the square with potentially suitable nesting habitat that you were unable to visit.

This estimate should only include significant areas of the square that you were unable to gain access to. You do not need to include small inaccessible areas (*e.g.* a fenced private street).

I estimate that I have visited approximately 60% of my square. Approximately half of the remaining 40% (*i.e.* 20% of the square) is woodland and therefore does not contain any suitable habitat. The remainder (*i.e.* 20% of the square) is a private estate that I was unable to gain access to, and contains a number of buildings spread around the estate. I therefore record that 20% of the square was inaccessible with potentially suitable nesting habitat.

The number of adult birds seen in the 1-km square

For each visit, estimate the number of adult birds seen in the 1-km square on the day of the visit (see example in Section 4, above).

Where only a small number of birds are present, you may be able to count all birds you see. In other cases, please provide the best estimate you can, based on the *number of birds seen* rather than the number of nests counted.

Number of nest deterrents observed

Please indicate whether you saw any houses where access to potential House Martin nest sites has been prevented by the homeowner. This may include:

- houses with wire in place to block access to eaves;
- houses with plastic bags, string or other hanging objects positioned to block access to the gable top.

You should estimate (or count) how frequently deterrents were observed, and select from three categories: zero houses with deterrents observed; 1-5 houses with deterrents observed; or more than five houses with deterrents observed.

This question will allow us to monitor how widespread the use of deterrents is. It aims to assess how many homeowners have taken steps to prevent House Martins nesting, so a semi-detached building with deterrents on both properties should be counted as two houses for the purpose of this question.

SECTION 6: SUBMITTING YOUR DATA

Inputting Data

Data should be input online by going to www.bto.org/house-martins, and using the Log In button to access your House Martin survey home page.

Returning Data on Paper

If you are unable to input your results online, please return your maps and completed forms to your Regional Representative, or directly to House Martin Survey, BTO, The Nunnery, Thetford, IP24 2PU.