

# BBS Online - Visit review

### 1. Introduction

BBS & WBBS data goes through a verification and validation process prior to being analysed each year. This process is undertaken during reviews of BBS/WBBS visits. This is usually done by BBS Regional or National Organisers. This manual describes how to review visits in the survey's web-based data collection and management application, 'BBS Online'. Figure 1 shows a schematic of this process.

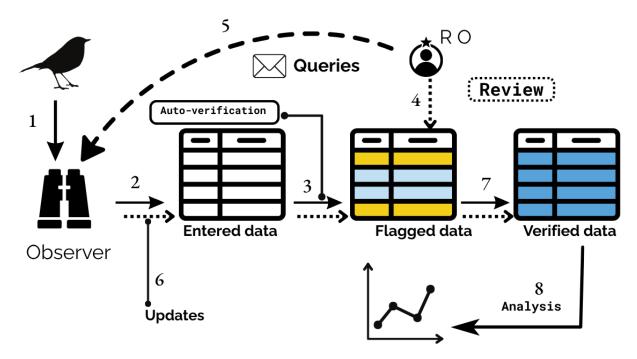


Figure 1: A schematic of the BBS/WBBS data validation and verification process. (1) Bird observations are gathered by observers and (2) entered into BBS Online. These observations go through an automated verification process (3), where some data are considered correct (light blue) or flagged for checking (yellow). All data are reviewed by Regional or National Organisers (4). Any queries raised against flagged records (yellow) are sent to observers (5) who update accordingly (6) and the review cycle continues until all data are verified (dark blue - 7). These data are then taken to calculate population trends (8) and for other purposes.

# 2. How to use this manual.

#### Either:

 Read through in order to get a complete overview of the process and some of the tools that are available.

#### Or:

Navigate to <u>Section 8</u> and follow along with one of three typical use cases.

Navigation to sections can be made via the contents page, or the 'bookmarks' section in your pdf reader (left/right hand panel).



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# 3. Validation & Verification

Reviewers will consider two separate aspects of the collected data:

- Validation: That the visit was undertaken correctly and according to the protocol. E.g., it was completed on the right date and time, all transect sections are accounted for and bird and habitat data has been collected in the appropriate way.
- Verification: The biological observations (birds and if completed mammal counts)
  are correct; the species recorded are appropriate for the location (distribution), time of
  year (seasonality) and abundance.

Some validation and verification is managed at the point of entry. Checks are put in place for correct dates, completeness of habitat data and so on. Thresholds are also included for species data to flag species that may be out of season, distribution or where counts are high. However, on top of these, an expert local eye is essential.

# 4. Tools for the job.

All visit review is done via the 'Square Summary' and 'Visit Review' pages of BBS Online. Some additional tools, mostly to help reviewers make decisions – (e.g., is a species likely to be right or wrong?) – are included in the <u>Appendix</u>. Importantly, the number one tool in helping you review is your experience; Regional Organisers are likely to have the local expertise and knowledge necessary; the additional tools are there to help.

 Square summary: As well as helping you manage your volunteers and participation generally, this page shows helps you manage which data needs reviewing and any further action. It also gives you access to historical data from a given square, which is important for comparison.



Figure 2: A row from your square summary, showing the observer, the previous data and the status of the visits for the present year. In this case, these two visits are awaiting review – action is needed!

• Visit review. This is the main tool where you will review visits and observations and – ultimately – approve a visit.

### 5. Verification status

During a visit review, reviewers will often be accepting or changing the 'status' of individual bird (or mammal) observations. There are seven statuses used in BBS/WBBS and these are common to other biological recording schemes (though there are others). The statuses – with descriptions – are listed in Table 1 below.



Table 1: The different verification codes used in BBS. Colour coding reflects both the eventual fate of records in each status and how they appear in BBS online. Only statuses in white ('correct') are taken forward for trends and other analyses.

Code	Category	Description/Application
90	Correct (evidence)	You have accepted the record and you have positive evidence (description/photo) that this record is correct
80	Correct (no evidence)	You have accepted the record, either through experience/own knowledge or that you feel there is no need to question something.
70	Assumed correct	The default state – the record has passed the machine-based threshold rules. A record like this can go in any direction, but most will remain like this – there is no need to change them all to 80 or 90.
45	Queried (await response)	Being actively queried. This is set either directly by a reviewer, or in bulk when sending a message via BBS Online and having previously been '40-Requires checking'.
40	Requires checking	This is the status set if a record fails the automated machine-based check at the point of entry. Or, the reviewer can manually select this option if they feel it deserves querying.
30	Unable to verify	You don't have confirmed evidence that the record isn't right, but you also feel it shouldn't be accepted. It might be a record that had been queried, but you cannot get an answer for. Or you just think is very unlikely on the basis of your experience.
20	Incorrect (evidence)	You have evidence that this record is incorrect. In time, these records usually get overwritten or deleted.

During visit reviews, reviewers will be changing the verification status of counts, either individually, or via automated 'bulk update' tools, depending on the circumstance. Reviewers will also be able to tell the status of a count at a glance, as each are colour coded (Figure 4).

Only records with codes of 70, 80 and 90 are used in calculating trends or in other analyses.



Figure 3: The verification statuses are shown in the 'View Observation Details' window, which is accessed by right-clicking cells in the visit review page.

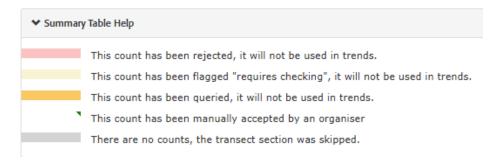


Figure 4: Bird and mammal counts are given separate symbols/colours to help you view their status at a glance. This summary table help/key can be hidden/collapsed.



# 6. Information from volunteers.

To help reviewers make decisions around the validity of visits and/or the verification status of observations, BBS Online provides two places where volunteers can add extra information. These are done at the point of data entry and in both cases, this information is available to reviewers during the review phase.

#### 6.1. Entering completed or missing transect sections.

A volunteer can either enter a transect section as normal [+] or if they were unable to complete it, state why [–]. Sections that the volunteer does not normally complete (e.g., because their square might have fewer than 10 sections) will be left blank, unless the volunteer wants to add this.



Figure 5: The data entry panel. Surveyors can add a submission (+) or mark as not done (-)



Figure 6: Volunteers can add a reason for not completing a section

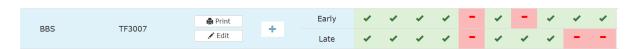


Figure 7: A completed visit. Most have been completed, with two sections not done for the Early visit and three not done in the late visit. Sections not completed can be reversed (e.g., the surveyor picked the wrong section)

#### 6.2. Observation comments

At the completion of an individual section submission, surveyors are presented with a summary of their counts, showing the breakdown of counts by species, distance band and detection method (if recording).

At this point, counts may be flagged for the reasons given above (distribution, season or count). Surveyors may then add notes against observations (Figure 8) – the primary goal is to encourage surveyors to confirm their sightings or provide additional context to help ROs and NOs make sense of them.



**Bird Species Records** Distance Band Validation Warning @ **Bird Species** Detection Method Observer Comments View/Edit this Submission 1: <25m 2: 25-100m 3: >100m F: Flight only Fider V: Visual 2 I confirm Black Redstart Black Redstart V: Visual this area. Please check you have and have photos if entered the correct species. needed

Figure 8: An example of a useful comment against a flagged record. These comments will be viewable by ROs later on.

# 7. Visit review - features & tools.

#### 7.1. Visit map pop up

To view the route map for a square, we provide a pop-up map. This is useful for checking habitat or that the correct number of sections have been entered.



Figure 9: Route map popup, accessed at the top of the review page.

#### 7.2. Missed transect section or no birds?

Reviewers will be able to see when transect sections have been skipped. In the Habitat, Bird and Mammal summary sections, these sections will appear greyed out (Figure 10). To review the reason for the missed visit, use the right-click function to open the details via the bird summary.



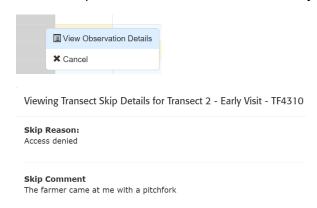


Figure 10: Sections explicitly recorded as not done by surveyors are shown in grey (left), with the reason given being accessed by the right-click 'View observation details' function.

## 7.3. View observation details

For missing sectors (grey columns) or individual counts (birds and mammals) more details can be viewed by **right clicking** (or equivalent for mobile devices) the relevant cell or column (Figure 10 and Figure 11).



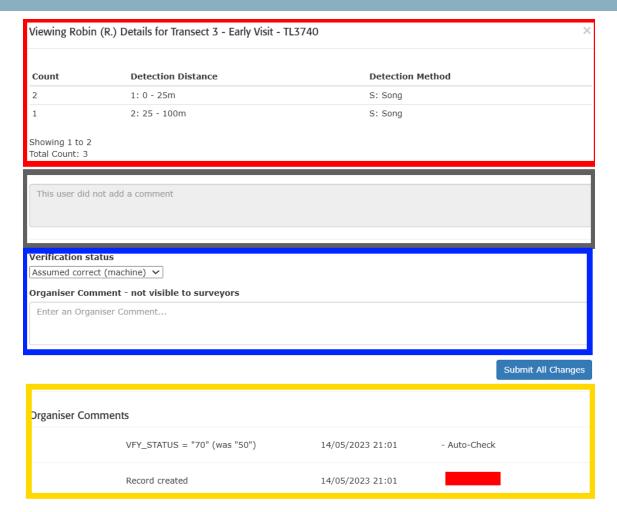


Figure 11: You can view many aspects of the observation: the different combinations of distance band and detection method (red), view the observer comment (grey), change the verification status and explain your reasons (blue) and view the audit history (yellow — more for NO benefit).

### 7.4. Updating the verification status of a record

There are two ways to update the verification status of a record.

- Individual records can be changed to any status in the 'View observation details' window (Figure 11).
- Bulk updates of records can be performed using the 'Approve' or 'Send email' tools.
   These will only update records marked as either 'Requires checking' or 'Queried await response). Approvals will result in these records being marked as accepted (Correct, no evidence), email sending will result in records being updated to 'Queried await response'.

# 7.5. Flag in visit comments

The mouse right-click function can also be applied to other data points within the visit review. By right clicking on the following cells, you will populate the visit comments field at the bottom of the page with the data point and its value. This can then be used later when composing a message to your volunteer.



- Dates, time & weather (top of page)
- Habitat data (either empty cells or completed cells)
- Total species counts (for example, you may wish to question the total count of a species during a visit, rather than any specific section count).

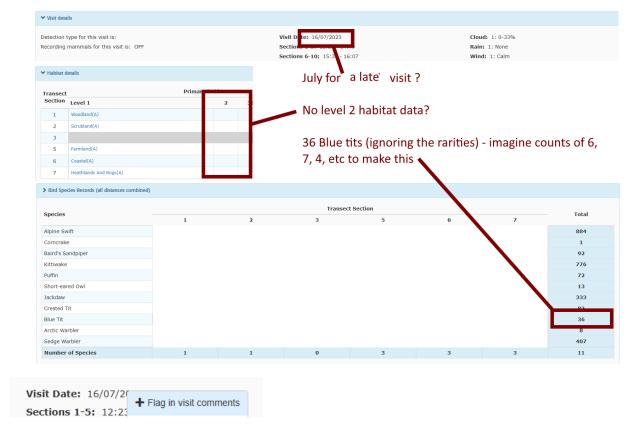


Figure 12: A view of a visit and the fields where the right-click 'flag in visit comments' can populate the email template.

# 7.6. Sending messages to volunteers

Reviewers may contact the observer about a visit from within BBS online.

You are provided with some template text to start with, but this may be amended. The template will contain.

- A greeting with the volunteer's name;
- The visit details (square, date, early/late);
- Any bird (or mammal) records that are flagged (yellow cells 'Requires checking');
- Any visit comment (either created from the 'Flag in visit comment' tool or added yourself;
- A note to the volunteer to reply to you (your name and email address are inserted into the text).

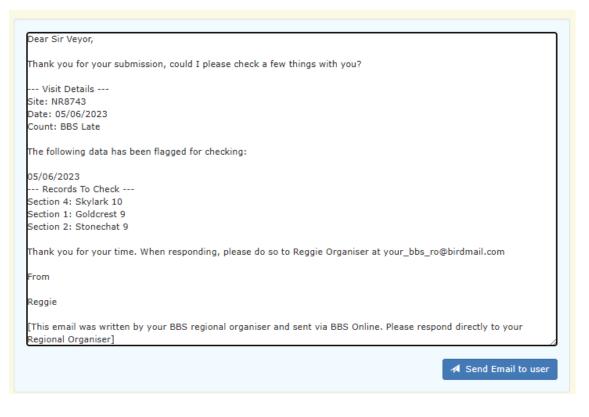
Messages sent to the volunteer from BBS Online have to come from <a href="mailto:bbs@bto.org">bbs@bto.org</a>. To mitigate any possibility that volunteers either ignore the message, or take it the wrong way, the email:

- Will include in the subject line: 'BBS Query message from your RO'
- Have as carbon copy your own email to the message. This will:



- o Give you a copy of the correspondence.
- o Ensure anyone 'replying all' will reply to you (anyone who replies to <a href="mailto:bbs@bto.org">bbs@bto.org</a> only will have their message forwarded by the BBS team).

Sending the email will automatically update any record that 'Requires checking' to the status 'Queried – Awaiting response'.



### Send Email?

This will set all the observations that require checking to "Queried - awaiting response", are you sure you want to send an email?



BBS Visit Reviewed - NR8743 Late - Message from RO - Dear Sir Veyor, Thank yo

Figure 13: The email template, which automatically collects any records that are marked as 'requires checking'. When sending, you are asked to confirm (and are reminded that any of those records will be updated to 'queried – awaiting response). The email then appears in the volunteer's inbox with a subject that indicates it was written by an RO.

If you don't want to use the in-built email function (you may think the volunteer might not respond to a message from 'HQ' but would otherwise do if it came from you) then you can still send emails separately. You can use the templated text as a quick way of generating the message. If using this route. Using this method will not mark records as 'queried, awaiting response' and so you should do this individually.



# 8. Reviewing visits

We illustrate the review process using three typical use cases, followed by some frequently asked questions.

#### 8.1. Case 1: A 'model' visit

This is what applies to around 80% of visits. In your review, you consider everything is fine and you simply want to approve the visit and move on to the next one. There may still be records that have been flagged by the BTO's verification system, but you don't feel the need to query them.

1. Open the visit review, either via opening the visit 'Awaiting review' in the square summary page or using the link in the notification sent after the volunteer edits data.



2. Scroll through the visit. You note there is either nothing flagged, or that the items which are flagged you are happy with (Figure 14).



Figure 14: Two snippets from 'normal' visits – everything as expected. Even flagged records (yellow cells) are ones that you are happy to accept. You are also happy with the visit dates/times and habitat data (out of view). It is a 'model visit'.

- 3. You can further inspect any counts, particular if you want to establish if a record might have been as a result of a typo, or you want to review the observer's comments.
  An example might be 10 Chiffchaffs in one section. Quite a lot, but not out of the question. Is this count perhaps because of a typo, e.g. a single count in one distance band that should have been 1, or are they spread across many distance bands, in which case it is probably fine?
- 4. To view how those 10 Chiffchaff were counted, right click on the cell in question and select 'view observation details' (Figure 15).



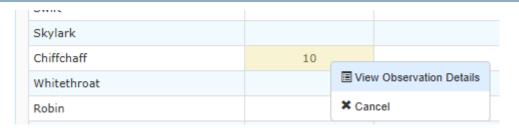


Figure 15: Right clicking on any bird or mammal observation opens up a number of details about that observation.

5. You can inspect how that count is 'built'. In this case, these 10 Chiffchaff are made up of observations from many distance bands and detections, so it is probably fine (Figure 16). It is a piece of ancient woodland, so quite high densities are likely.

Viewing Chiffchaff (CC) Details for Transect 1 - Early Visit - SK0183

Count	Detection Distance	Detection Method
3	3: > 100m	V: Visual
2	1: 0 - 25m	S: Song
5	2: 25 - 100m	S: Song

Showing 1 to 3 Total Count: 10

Figure 16: 10 Chiffchaffs were, in this case, recorded over multiple distance bands, so this isn't likely to be a typo and you conclude it is a plausible count.

6. You also see that there is a comment left by the observer. In which case, you can be sure that this is an accurate count (Figure 17).

There really were lots singing, many at the same time as others, so I am confident on the number and as sure as I'll ever be that this has no double counts.

Figure 17: An example of a useful observer comment.

7. You can accept this record there and then (Figure 18). Half-way down the page, you can set the 'verification status' and 'accept' the record. In this case, we would choose 'Correct (evidence)'; you have some feedback from the volunteer (for a full description of the codes and when to use them is provided in <u>Table 1</u>).



Verification status	
Requires checking 💙	
Correct (evidence)	ible to surveyors
Correct (no evidence)	
Queried - awaiting response	
Requires checking	
Unable to verify	
Incorrect (evidence)	Submit All Changes

Figure 18: You can update the verification status of observations using the view observation details window.

- 8. You can also include your own comment ('Organiser comment...). This is only visible to ROs and BTO staff.
- 9. When updated, click 'Submit all changes'.
- 10. Alternatively, if you didn't want to inspect each flagged record and you just wanted to accept the whole visit (everything about it is fine dates, habitat, birds) then this can be done in one go Approve Visit, at the foot of the page.
- 11. Clicking Approve Visit will simultaneously accept any counts that remain flagged (or queried, see below) and mark them as 'Correct (no evidence)'. By choosing approve, you are also telling us that all other aspects of the visit (date/time/habitat) are to the best of your knowledge acceptable.



Figure 19: Selecting 'approve' will result in all queried or flagged records being accepted. The visit is then marked as 'Approved' in the Square summary. I.e., there is nothing more to do.

12. Were you to re-enter the visit review page from an approved visit *and* there had previously been some records flagged as 'Requires – checking' then these will now be marked with a small green flag, to indicated that there is a history of change against them:



#### 8.2. Case 2: Records to query

Sometimes, one or two counts needs checking with the surveyor. Whist the machine-based validation step is over-cautious/a little behind with distribution change, sometimes there are errors that really do need checking.



- 1. Open the visit 'Await review' as above.
- 2. You spot or are drawn to a record that is almost certainly not right (eg., GF a common error for GO or GR).
- 3. If the record is already flagged, you can open the observation details to see if the observer has left a comment. In this example, you leave it as 'requires checking'.

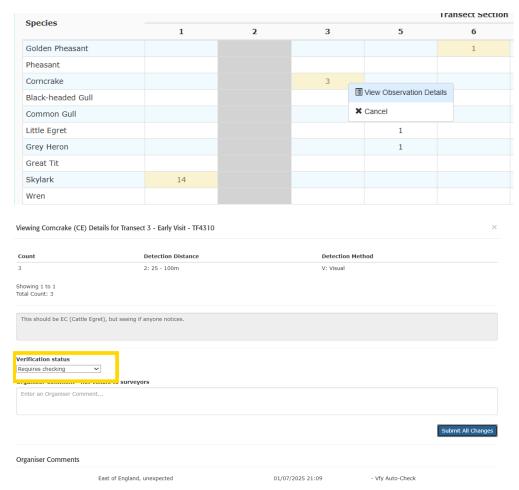


Figure 20: Opening the 'observation details' (right click on cell) gives you more information about the record. It is flagged as 'requires checking'. You want to query it with the volunteer, so you leave it like that.

- 4. You spot another record, this time it is not flagged, but you would still like to find out more.
- 5. Open the observation details; you want to check it.
- 6. You decide it needs querying with the volunteer. Change the verification status to 'requires checking' (Figure 21).





Step 2 – Review the information in the 'View observation details' window.

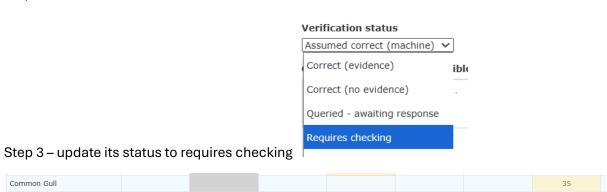


Figure 21: For records that are not flagged by the system, you can still manually change these to 'requires checking'. Once submitted, the cell turns yellow, as it would if it had been flagged automatically.

7. Once you have all the counts that you want to flag (Figure 22), you can now use BBS online to send your volunteer a message.



Figure 22: Your review page, complete with all the counts that you want to query with the volunteer. Most visits won't have this number, perhaps just one or two.

- 8. Navigate to the foot of the page and choose up below, with some pre-populated text (see Section 7.6 'Sending messages to volunteers' Figure 23)
- 9. The template email can be edited. It is prepopulated with some basic visit details, plus it is also populated with the flagged counts from above, but you may change the wording and layout to suit you or your volunteer (Figure 24).





Figure 23: The prepopulated text, with the basic visit details, plus any counts that were flagged, either by you or the system.

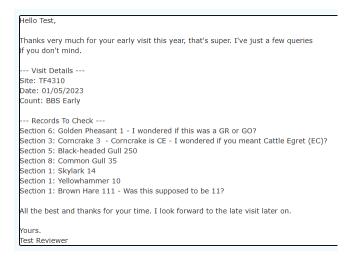


Figure 24: The same message as Figure 23, but personalised.

- 10. You may alter the text as you see fit. One consequence of using BBS Online in this way is that the email will appear in the recipient's inbox as "From: bbs@bto.org". You may therefore wish to personalise the message, to make it absolutely clear that it really was written by you (Figure 24).
- 11. When you are ready to send the message to the surveyor, you will be prompted for confirmation (Figure 25).



Figure 25: You are prompted for confirmation (top) and then your square summary (bottom) shows a different status. Visits with this status will need further attention



- 12. As well as sending a message, this action will also automatically convert all the counts which had been marked as 'requires checking' (yellow) to 'queried, await response' (orange).
- 13. ROs will also be ccd into these messages you will therefore have a record of your communication.
- 14. This will be the last act of your review for now and you will return to the Square Summary page. The visit will now be marked as *'Reviewed, Queried Counts'* (Figure 25).



Figure 26: When returning to the visit, you would see that now, all the previously flagged counts (yellow) are marked as queried (orange)

- 15. Your email has gone out and you have answers.
- 16. You have received a message from your volunteer, what now?
- 17. Return to the visit in question. What you do next depends on the response from the volunteer.

Option A. All counts are correct.

A.i. In this case, and assuming you have no other queries about the visit, you can use the same method as described above (section, 8.1 (11) – "Approve").

A.ii. This will automatically update your queried records to 'Correct, no evidence' (the default accepted status) and the visit status in square summary is changed to



0	Transect Section									
Species	1	2	3	5	6	7	8	9	10	Total
Golden Pheasant					1					1
Pheasant								1		1
Corncrake			3	`						3
Black-headed Gull				250						250
Common Gull							35	`		35
Little Egret				1						1
Grey Heron				1						1
Great Tit							1			1
Skylark	14						4			18
Wren						1				1
Blackbird					1					1
Linnet			3							3
Goldfinch					1					1
Yellowhammer	10					1				11
Reed Bunting			1			1				2
N	2			-						

Figure 27: Returning to the visit shows that now, all the previously flagged, then queried observations, are now accepted. These are marked by the boxes with corner flags.

Option B. Some are correct, some are incorrect. In many cases, the volunteer will be the one responsible for making corrections, though ROs can do this on behalf of volunteers (Figure 28).



Figure 28. View/Edit Count Details is available at the top of each visit review page. Clicking this takes you to the data entry page for that volunteer, where you are able to select the necessary visit and section to update.

B.i. In this case, you will need to individually change the verification status of the queried records. Open 'visit observation details' (right click) and mark those which are incorrect as appropriate: 'unable to verify' or 'incorrect (evidence)', as you see fit.

Viewing Golden Pheasant (GF) Details for Transect 6 - Early Visit - TF4310				
Count	Detection Distance			
1	1: 0 - 25m			
Showing 1 to 1 Total Count: 1				
that old chestnut				
Verification status				
Incorrect (evidence)	J			
Correct (evidence)	ible to surveyors			
Correct (no evidence)				
Queried - awaiting response				
Requires checking				
Unable to verify				
Incorrect (evidence)				

Figure 29: You can open some of the records and mark as 'incorrect'



B.ii. Any remaining records which are correct can be individually updated in the same way or done in bulk via the 'Approve' visit method (see above).

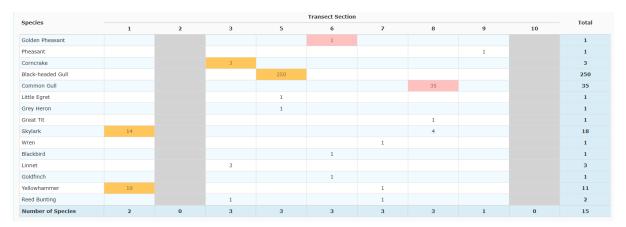


Figure 30: In case [B] above, you want to reject two of the counts (Golden Pheasant and Common Gull), but you are happy with the others. By marking the former as 'incorrect', these turn pink. You only need to update the former two to 'incorrect'. The rest can be dealt with via a bulk update when approving the visit. Or they can be altered individually.

Whether [a] or [b], once you your visit review is complete and you can 'Approve' it.



Figure 31. The same approved visit as for Figure 27, only you had decided not to accept two of the records (now pink). The other records that are now accepted, having previously been queried are now marked with a green triangle.

#### 8.3. Case 3: Querying non-bird/mammal data

This section is mostly to demonstrate how to raise queries against data which are not the section-level counts (bird or mammal). Sometimes, visit dates, habitat data or some other general feature of the visit is in question. An occasional case is where all bird data appears against a single section (usually S1).

1. Open the visit ('Await review'). You are happy with all the bird and mammal data (though it might be that some counts are flagged in yellow), but you spot some missing habitat data (the absence of level 2 habitat is an occasional problem), you think the visit date is wrong, or



you think that the total count of a particular species is questionable, even if – on their own – the section level counts seem fine (this is not an exhaustive list of reasons). For all data that is not a section level count, there is a different way to raise a query.

2. Right click on the data field/cell and select 'Flag in visit comments':

```
Visit Date: 16/07/2
Sections 1-5: 12:23
```

- 3. This will add the item to the comment box at the foot of the page. Do this for as many fields as necessary.
- 4. Once you have compiled your list of queries, open up the email template; you will find your different queries listed. You will almost certainly wish to reorganise to suit your volunteer and/or your own preferences (Figure 32).

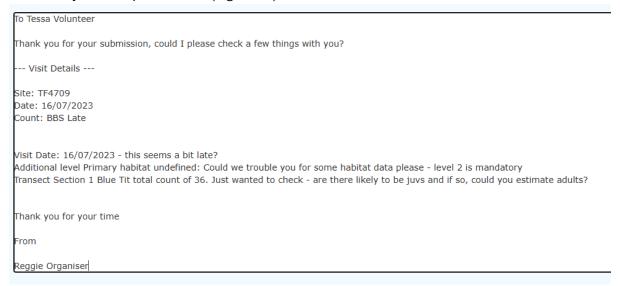


Figure 32: The email (since edited by the reviewer) with the three elements in question.

- 5. Send this email as above.
- 6. You will return to the square summary.
- 7. Depending on whether you also had observations that were marked as 'required checking' or not, your visit status will be marked in one of two ways:
  - a. Reviewed (Pending): In the example above, there are no queried counts.
  - b. Counts): Visits that also have counts marked as 'required checking will also have these updated to 'queried await response', and so the status reflects this.
- 8. Once the issue has been resolved (e.g., date corrected, habitat data added etc), then the visit can be 'approved'.



# 9. Frequently Asked Questions

# If I'm happy with the visit, do I have to manually update each flagged count to 'correct' before completing my view?

No. The 'approve' button at the bottom of the page means all of those records will be updated to 'correct - no evidence' automatically. All you need to ensure is that any count that is incorrect has been updated as such. Approve will update <u>all</u> flagged records to 'Correct (no evidence)'.

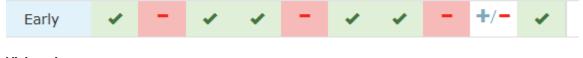
#### Can an approved visit be 'reversed' if new information comes in?

Yes. If there are counts that do need to be flagged or queried after a visit has been approved, then you can open the visit review page, change the status of the record(s) in question and then proceed as you would had the visit been 'Awaiting review'. The visit will then revert to 'Reviewed – flagged counts' or 'Reviewed – Queried counts', depending on the status of records.

#### What does it mean if a section does not appear at all in the habitat or bird summary?

This means that no data has been entered against this section, or the volunteer hasn't chosen the skip transect option. This will most likely apply to sections that don't exist (e.g. squares where there are fewer than 10 sections); we are not asking surveyors to mark non-existent sections using the skip function, only those they would otherwise have done, but didn't for some reason.

# Data entry screen



# Visit review screen



Figure 33:Sections that don't appear in the visit review will be those where neither a submission has been made, nor a 'skip transect' indicated. In the example above sections 2, 5 and 8 have been explicitly skipped and therefore greyed out. Section 9 has not been entered or skipped and so is absent from the summary table

#### What is the 'save visit' button for?

Use the save visit button to leave the review without 'Approving' and to be taken to the Square Summary page. You can use the 'back' button on your browser, but if you had arrived at your visit from the link in an email notification, this will not take you the Square Summary Page.

• **Do I have to use the email function?** I'd rather do my queries over the phone or use my own email account.



That is perfectly fine – you don't have to use the built-in method. The one advantage of using the built-in function is that it will update all the records flagged as 'Requires checking' to 'Queried – awaiting response' in one go. However, if you conduct your queries outside of BBS Online, you can still update those records yourself individually, using the 'View observation details' (via right-click) window. You can also skip that step and wait for the answer to the query, where you can update the record to either of the two 'accept' or two 'reject' options.

#### What are the visit comments for?

This is a place for you to make comment about the visit as a whole, rather than individual records. Any text in this box will be pulled into the email template when you are ready to compose this but can always be edited afterwards. Text around visit metadata (date, time, weather etc) can be placed into the comment box using the right-click 'Flag in visit comment' tool.

# A surveyor has admitted that a flagged species record is because of a typo. Can I edit this myself?

Yes. Regional and National Organisers can edit surveyor data via one of two routes. 1. From the RO/NO tools page, choose the 'Enter data on behalf of a volunteer'. Choose the user and then edit the data as if it were your own. 2. From the visit review page, you can access the data entry 'grid' directly by using the orange 'view/edit count' button. Quite often, volunteers make take a while (and sometimes forget) to edit errors, so it is helpful for ROs/NOs to do so, especially when you are already working in BBS Online.

### I disagree with some of the counts that are getting flagged – what can I do about it?

Some of the thresholds for counts, arrival dates and distribution are slightly behind birds' changing phenology, especially in light of climate change – BTO have some work to do to address this. However, the BBS verification system is also built on geographical regions that are quite large, and so the thresholds are quite coarse. A coastal square for example, will have some seabirds which are flagged simply because those species are considered rare for the wider region (e.g., 'Yorkshire and Humberside'). BBS would like to modify the method to use a much finer grained geographical scale and new, updated Atlas data will help with this.



# 10. Appendix

Below is some more information on BBS verification thresholds and sources of information you might wish to use to help you when reviewing records.

#### 10.1. Data Verification System thresholds

Prior to an RO's review, many records are automatically 'flagged' using a set of thresholds. A good place to start is to consider the various reasons why a record may be flagged up by the Data Verification system. The three main criteria are:

- Location: If a species has been reported in either an area that it is not usually seen (such as a Capercaillie in the lowlands of England for example) or sometimes, a species that hasn't been recorded in that square or stretch before. Please note that some species that are flagged up are increasing at such a rate across the UK, that the Data Verification system lags a little behind. Examples of this would be Ring-necked Parakeet in parts of England or Great Spotted Woodpecker in Northern Ireland.
- <u>Number</u>: If the count of a particular species in a 200m sector is higher than 'expected'. This is useful for catching obvious 'typos' e.g., a surveyor meant 1 Treecreeper, but they have accidentally pressed [1] twice, thus leading to 11 Treecreepers. Another important reason for the numbers being flagged up, especially in Late visits is for ROs to double check that surveyors are doing their best not to include juveniles. A good example of this would be if someone reported two Long-tailed Tits in one of their transect sections during their 'Early' visits and then 11 Long-tailed Tits in the same transect section during their 'Late' visit. The system will flag this up and although it is not always the case that the 11 Long-tailed Tits would include some juveniles, this often is.
- <u>Date</u>: The date rule is usually triggered when a species is reported out of season. A couple of examples of this would be a Swift being reported on 1 April (which is extremely early for this species in the UK) or a Fieldfare being reported on 22 June (when the vast majority of this species should be on its breeding grounds in Scandinavia or Iceland). Although either species is possible on these dates, it would be quite exceptional).

The present rules on which these thresholds have the following characteristics:

- Counts are based on 200m sectors (which is the unit of each individual 'submission' and based on the mean number recorded across a region) and the rules based on past BBS averages.
- These regions are quite big (i.e. verification rules do not operate at the level of the square, but at quite large geographical regions). This would lead, for example, for the persistent flagging of seabirds on some coastal squares. Fulmars may be rare for a given region (the East of England, for example), but not necessarily on a given square on the east coast. Nevertheless, these are still flagged up.
- These rules are only periodically updated and so are always some distance behind the real distributions/arrival dates.



 By necessity, they have to be a little conservative - better to be sure, than let too many spurious counts through the net.

#### 10.2. Tools in BBS Online

There are plenty of tools to use to help you in the 'Visit Summary' when you click onto an individual visit.

#### Maps



When in the Visit Review page, you can access a pop up of the map of this square, which includes the transect routes. This can give you immediate access to the likely habitat in the square (as well as letting you check the habitat data). The habitat data alone, as it comes only within 50m of the transect, is often insufficient.

#### Visit details

 Visit Date: 09/05/2024
 Cloud: 1: 0-33%

 Sections 1-5: 09:25 - 11:20
 Rain: 1: None

 Sections 6-10: 12:07 - 12:55
 Wind: 1: Calm

 Visibility: 1: Good

You can glean quite a lot of information from this table. Firstly, if a migrant bird species is flagged up, check the **date** of the visit, as the wrong date may have been entered. If you have a suspicion that a volunteer may have entered the wrong date for their visit. Visit metadata (date, time etc) is just as important as the bird data itself – remember to check this at the same time.

The **time** and **weather conditions** can also be useful reference tools. If you notice that there aren't as many birds reported in a visit that you would perhaps expect, check the time and weather conditions. Although surveyors shouldn't be surveying their squares or stretches in the middle of the day or in bad weather, sometimes they do.

Equally, if you notice that there are more bird of prey records than you would perhaps expect, it may be because a surveyor is out and about in the middle of the day.

### Grid square summary



	Max number of individuals per year					
Species	2022 👤	2023	2024			
Red Grouse	1	5	5			
Golden Plover	9	5	5			
Curlew	4	6	1			
Snipe	1	1				
Lesser Black-backed Gull			5			
Carrion Crow			2			
Raven	1					
Skylark	11	11	9			
Willow Warbler	1					
Wren			2			
Wheatear	1					
Dipper			1			
Meadow Pipit	54	23	15			
Number of species (total: 13)	9	6	9			

This is a really useful tool that you can use to find out which species have been recorded in a square or stretch previously. A repeated example is the presence of **Red-necked Wallaby** on a BBS square on the Isle of Man. This species is always likely to be flagged up, but on this square, it is a regular.

One of the things that you can do within the Grid square summary is to get historical counts by sector. Whilst the year sum is a handy guide, sometimes it will be necessary to see what is regularly recorded on a square at the sector level, this being the unit of which the rules are applied.

An example of this can be found on a square in Orkney. **Shoveler** is a scarce species on the islands, but each year for the last few years, at least one is recorded in the same transect sector each year. Presumably, there is a loch visible from that transect sector that it lives on. These kinds of clues can be really helpful when verifying data.

On the other side of the coin, if a species has been flagged up as it has not been recorded in a square before, it is worth double checking that the surveyor hasn't **mistakenly entered a species** or **put the wrong BTO species code in**.

### BTO species code errors

It is well worth having the <u>list of two letter BTO species codes</u> open when you are verifying data! If you spot a record that doesn't look quite right, check the BTO species code for that species, as a surveyor may have entered the wrong BTO species code.

Here are a few to look out for, that can often be a cause of confusion:

- S. is Skylark, whereas SL is Swallow and Siskin is SK.
- GF is Golden Pheasant, whereas GO is Goldfinch and GR is Greenfinch.
- BK is Black Grouse, whereas B. is Blackbird.
- W. is Wheatear, whereas WR is Wren
- G. is Green Woodpecker, whereas GR is Greenfinch

If you find someone who clearly struggles with their BTO species codes, you can pass on the fact that they can, instead, type the species name in directly.



Row	Two letter code	Species Name	Distance Band	Detection Type	Count
1		Xel	1, 2, 3 or F	V, S or C	
2 📵		Greater Yellowlegs Lesser Yellowlegs	1, 2, 3 or F	V, S or C	
3 🙃		Yellow Wagtall Yellow-billed Teal	1, 2, 3 or F	V, S or C	
4 🖸		Yellow-legged Gull Yellowhammer	1, 2, 3 or F	V, S or C	
5			1, 2, 3 or F	V, S or C	

#### Rare birds

If someone has reported a rare bird on their square or stretch, there are several ways that you can find out if that bird has been seen by someone else/is more widely known about. One of the best places to start is your **local Bird Club website**, as they often list sightings of note. If you have **Bird Guides/Rare Bird Alert**, you could also look on there. Additionally, you could try contacting your **County Bird Recorder**. Unless a species is being kept quiet for a reason (i.e., it has shown some signs of breeding behaviour), they will usually tell you if a rare bird has been seen by other people in a given area. You could also try looking in past **County Bird Reports** to see if a species has been reported in an area before.

Additionally, and perhaps most importantly, remember that you have the local knowledge, so please use your judgement if you see that a rare bird species has been reported.

#### **Mammals**

Please don't forget to look at the mammal records that get flagged up! If you are not too knowledgeable about where mammals are distributed in your area, the <u>Mammal Society</u> website is a great place to start.

Also bear in mind that as well as sightings, surveyors can also report finding signs of mammals and also local knowledge. This has led to an increase in **European Beaver** records on BBS squares and WBBS stretches across the UK, especially in Scotland. Although This species is rarely seen due to its mainly crepuscular habits, they often leave quite obvious signs in areas that they inhabit.

Other non-native mammal species are also increasing their range, especially **Muntjac Deer** and **Chinese Water Deer** across southern England. Other species, such as **Racoon Dogs**, are only present in small numbers in scattered locations across the UK.

If you are worried about verifying your mammal records, please be reassured that records are also verified on a UK wide level at BTO headquarters. The mammal data that feeds into population trends for the UK are only for nine common and easy to identify species, so hopefully not too challenging a task. For rarer species, additional help is at hand.

#### Average arrival/ departure dates of migrant bird species

If you would like a rough reference guide of when different migratory bird species arrive for the summer/ depart for the winter, **this webpage** may be of use to you. Although some of the dates mentioned are based on data that is quite old, it at least gives you some guidelines on when to expect certain species.

These dates will of course vary according to several factors, including where you are in the UK, what the weather is like (both in the UK and in non-breeding areas) and to a certain extent, the population status of the particular species in question at that time.



Please remember that due to the nature of the survey, the majority of bird species that get flagged up due to dates are summer migrant species. However, especially for 'Early' visits, some winter visitors may still be lingering. This could potentially include species such as ducks, geese, swans and waders for example, that don't always head back to their breeding grounds until April, May or even June. In terms of smaller birds, it is well worth trying to get to grips as to when species such as **Fieldfare**, **Redwing**, **Brambling** and **Redpoll** tend to leave to return to their breeding grounds from your local area.

# Use your local knowledge.

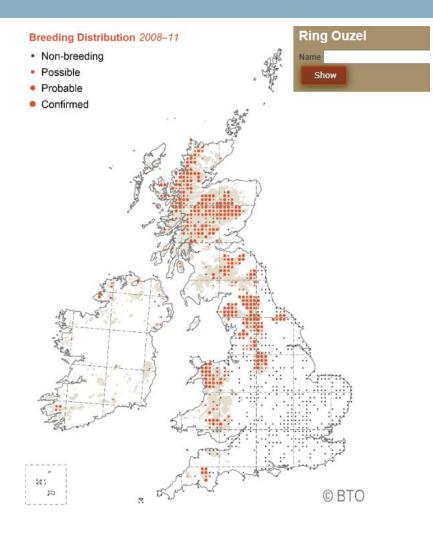
Finally, and perhaps most importantly, use your local knowledge. You are likely to know the area – and its bird life – just as well, if not better than anyone.

#### 10.3. Other resources

Bird Atlas Mapstore: https://app.bto.org/mapstore/StoreServlet

This is a great place to search for distribution maps of breeding birds across the UK. Take a look at the <u>Map Store Viewer</u> here. Although the data that this is based on is now over 10 years old (the last Atlas Period ran from 2008–11), it will at least give you an impression of whether a species has been previously recorded in a particular area during the breeding season.





BTO Map store: An online repository of Atlas maps (breeding and non-breeding). The Breeding range of Ring Ouzel in the 2008–11 Atlas period. Whilst a Ring Ouzel could crop up almost anywhere on migration, if records come from outside of the red areas in late May or June, it could be worth checking.

# BirdTrack: https://app.bto.org/birdtrack/

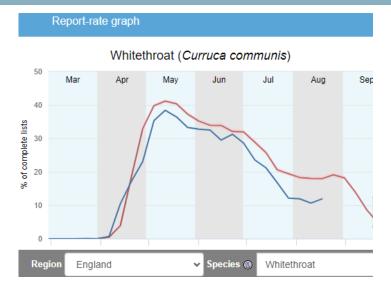
The 'Recent Sightings' map function on BirdTrack can be useful for finding out where particular bird species have been seen. The recording rate graphs can be particularly useful for finding out whether a summer migrant species arrived earlier or later than average in a given year.



BirdTrack maps: Recent and past records of Cattle Egret at the southern edge of the Cambridgeshire Fens.



BirdTrack reporting rate graphs: In 2024 (blue), the initial movement of Whitethroat was a fraction earlier than the 10-year historical average.



# BTO HQ: bbs@bto.org

If you are note sure about a particular query, or how to go about querying it, please email us at the usual place. We are here to help! If the BBS team can't answer your question, we are never far away from some of the most eminent ornithologists in the country.