eBird

Review Tool and Filter Instructions

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Introduction

Thank you for your willingness to assist with reviewing eBird records. You have been selected because of your local expertise and ability to constructively correspond with our users about their unusual sightings. Reviewing records is not simply a matter of quietly going through and validating and invalidating records. Rather, our strongest regional editors take time to build relationships with our users and help them improve their birding skills and eBirding abilities. You will become one of the primary points of contact between eBird and our user community. Please do what you can to encourage users in a supportive manner and help build the eBird community. People make mistakes. We encourage you to contact and assist them. If you continually invalidate records without letting people know, they are unlikely to learn, will keep making the same mistakes, and ultimately take more time.

Data quality is of paramount importance at eBird. Brian, Chris, Marshall, and Ian have all been on records committees and take documenting rarities very seriously. It is an ongoing challenge to identify and assess data coming into eBird. We will continue to develop new ways of exploring the data that will help to bring erroneous records to light, but depend on you to discover and assess these records in your region.

We strongly prefer that you use eBird to submit your own sightings on a regular basis, as it is important to understand the system in order to effectively review records. At times users may respond with questions about how to best report their sightings within eBird, and we'd like you to be familiar with the process so that you can assist with those types of questions. If you do not already use eBird, please consider regularly submitting checklists to understand the system.

There are two main components to eBird data quality: automated filters and expert review. In this document, Part I covers using the review tools, and Part II covers filter creation and editing.

NOTE: With this revision this document is officially becoming public. From this point forth we will always have the most current version of this document posted at this link in the eBird Help Center: <u>http://help.ebird.org/customer/portal/articles/1822748-ebird-review-standards</u>. We encourage you to go to this link to access this document from now on. This document is the 26 Jan 2015 version.

Most importantly, thank you for your help in building eBird and making it better. Without you, eBird would not exist. If there is anything we can do to help, please contact us at any time.

Thank you,

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Part I: Using the Review Tools

Part I of this guide addresses the basics of logging in and viewing your records, and reviewing and clearing each record from your queue.

Log In and View Your Assigned Records

How do I log in?

Go to this URL: <u>www.ebird.org/admin</u>. If prompted to log in, enter your eBird User Name and Password. If you can't remember them, contact us for help.

Your review assignment

Once logged in, you'll immediately see a list of records awaiting review. It's important to note that you will only be looking at data submitted in the state/province or counties you've agreed to edit. You can sort, filter, and search these records based on many parameters, but you'll only see records from your assigned region.

What if I can't see any records?

In some cases, there may not be any flagged records submitted for your review region. Try to search for a record of a fairly rare bird that you know has been recorded in your region (See page 12 for information on how to search). If you still do not see any records, please contact us, as there may have been an error in setting up your review assignment.

The review tools only work on a limited number of web browsers. Given the small number of people using them, we can support only the latest versions of Chrome, Safari, and Firefox, which you can download at the URL below. We are unable to support Internet Explorer in these tools, especially older versions (you may be able to use IE 9 for some review tasks, but we do not recommend it). If you still can't see any records in review, please contact us for help.

Download Firefox here: http://www.mozilla.com/en-US/firefox/

Navigating the review tools

Three tabs are found on the upper-right of the page. When you log in you are automatically taken to the Review Observations tab. The three tabs are used as follows:

Review Observations: Primary purpose is to review the flagged records in your region. You can view, filter, and validate/invalidate records currently in the review queue.

Search Observations: Primary purpose is to search the database based on criteria you define. You can search for records based on a variety of criteria such as species, date range, location, and user name.

Filters: Primary purpose is to view and edit regional filters. You can view all filters. However, you must be granted privileges to edit a filter (contact us). With privileges, you can edit filter limits, adjust dates, and add/delete species or subspecies. You can also copy and create filters. See Part II of this document for instructions on creating and editing filters.

How are records flagged?

eBird flags records for review based on the filter limits set for each species in each regional filter (e.g., Tompkins County, NY). If a count entered for a species is greater than the filter limit for the observation date, the record is flagged for review. Thus, a record of one Blackburnian Warbler in Ithaca, NY, on 15 January would be flagged for review, but ten would be acceptable on 15 May. Records are typically flagged for the following reasons:

- **Rarity:** a species that is rare or unusual in the region
- Out of season report: a species reported outside its normal date range in a region
- **High count:** a species count that exceeds what one might expect to find in a typical day's birding in the region on a particular date
- Not on checklist: a species not on the checklist. Examples include a first state record, a record new to the region, exotics, hybrids, or even regular subspecies or spuhs (e.g., scoter sp.) that are not shown on the current checklist. *If the bird is expected and deserves to be on the list of species, please be sure to add it.*

More than one reviewer per state?

In some regions we have more than one reviewer and the review team should develop a system to review records. It is important not to contact eBirders multiple times about a given record. The history of review actions by each reviewer can be seen under the *History* link. Records that have already been queried, but have not been finalized using the *Review complete* box (see below), are set to *In Review*. In these cases, you may want to enter into the notes box something like "Rob Fergus is contacting observer" so that other reviewers in your state don't pursue it. Other users can see your actions by clicking *History* in any record that's in review. You can see who made the changes, so feel free to contact the reviewer to follow up on what is happening.

Current reviewers

A list of our current reviewers is maintained at this Google Docs spreadsheet: http://bit.ly/1CFRUIX

You can view the current editors and their assignment but will be unable to edit this document. Please let us know if changes are needed.

Review Observations

Filtering your list of records

When you first arrive at the Review Tools page, you'll see all the records that you are responsible for reviewing. To filter the list of records, click *Filter list* (near the top-left of the page). Then select or type a value by which to filter the records, for example Monterey in the County field. This will limit the records to only those from Monterey County, California. You can also enter a specific date range to work on recent records only or filter by species, observers, or specific locations. Once you have the subset of records you are interested in working on, move on to the review process.

Sorting records

Records on your review list are sorted by sighting date, with the most recent records first. You can change the sort order by clicking a column heading, such as Location or User. Most sort options are self-explanatory, but a few require extra explanation:

Species: You can order species alphabetically (*Alpha*), taxonomically (*Tax*), or by category (*Cat*). Sorting by category (*Cat*) clusters by taxonomic category (species, subspecies group, spuh, slash, hybrid,

intergrade, form, domestic) and then sorts taxonomically within each cluster. This can be a useful way to quickly process subspecies, slashes, and spuhs, which usually are valid submissions but may not be regular options on the filter. Remember, in many cases the subspecies, slashes and spuhs should be on this list so be sure to add them so you do not need to keep reviewing these.

Note: The Note column displays an icon to indicate the type of comments that have been included with the record. A small balloon indicates comments have been entered, a black arrow indicates that there is a URL link (hopefully to a photo of the bird) in the comments, and a small camera indicates an embedded photo (hopefully of the bird in question). Sorting by the Note column quickly places records that may be easiest to process at the top of the list.

Status: You might also wish to sort based on Status. This indicates whether records are *in review* (e.g., you've already emailed the observer) or *unreviewed*, records for which the observer has not yet been contacted.

Reviewing a record

The details for each record are contained on a single row. You have access (either directly on the page or through links) to all of the information associated with a particular record. Your job is simply to validate or invalidate unusual species and numbers. Your goal is to keep your list of review records as short as possible by reviewing the observations that appear here on a regular basis.

Column descriptions

Check box: selects a specific record to take review action. You can act on multiple records by selecting the check box at the top of the column to select all records, or you can individually select multiple records. **Please use the** *select all* **option with caution. Most mistakes in review happen when you select too many records at one time.**

Submission: this is the unique identifier assigned to a checklist submitted by an observer. Click the Submission ID to view the full checklist. This may give you information to assess the experience of the person sending in the record. If it contains a number of questionable records, you may be more inclined to invalidate the observations without further investigation. When the window containing the full checklist is displayed, you can work on reviewing the entire checklist from this view. **Important**: The checklist also contains the comment fields for the checklist, which may include comments from the observer on the species in question. It is often a good idea to check these before invalidating a record since they may contain information on other observers, whether a photo was taken, and whether the observer noted the rarity of the sighting.

Species: the common name of the reported species. Clicking *Alpha* organizes the review list in alphabetical order; *Tax* organizes the list in taxonomic order, and *Cat* clusters this list by taxonomic category.

Count: the number of individuals of the reported species.

Date: the observation date.

User: the observer's name. Click the name to open a window containing information about the observer. Click the email icon to automatically generate an email to the observer asking for more information about the record. Note that privacy revisions in 2014 made it possible to set your public display name as "Anonymous eBirder" but that the person's real name will still be displayed to reviewers. Some users may opt to leave their first and last name blank, which is not preferred. As a reviewer, feel free to contact these users by email to ask them to enter their real name and then to set their display name in "Preferences" as they wish.

Location/County, State/Prov: these columns provide the location name, county name, and state or province where the observation was made.

Validity: a record can have two values: *Valid* or *Not valid*. It is up to you to set this value. If the record has been flagged, it is set to *Not valid*. If you are satisfied that the record is correct, set this field to *Valid*. If you think the record is *Not valid*, leave it as such, select the *Review complete* check box, and then click *Change*.

Review status: the record can be *unreviewed*, *in review*, or *reviewed*. If a record is *unreviewed*, it needs your attention. If a record is *in review*, either you or someone else (click the *History* link to learn who), has started to review the record. If it has been reviewed, the record needs no more attention in most cases, and you will see this status primarily when using the *Search* functionality.

Filter: click this link to view/edit the filter values for this species at this location.

History: click this link to view the review history of this record.

Acting on a record

Use the green bar above the list to carry out actions on the records in your list. Once you have selected a record on which to work, use the following options to perform review actions.

Validity: All flagged records are automatically set to *Not valid*. If you wish to validate the record, set this field to *Valid*. Leave the record set to *Not valid* while awaiting documentation.

Reason: In order to validate or invalidate a record you **must** provide a reason. This is very important, since your decisions may be overruled later if there is no reason to defend why a certain action was taken. The drop-down list contains reasons why records should be set to *Valid* or *Not valid*. *Refer to page 9 for the definition and usage of each category*.

Notes: This is the place where you can copy and paste pertinent reviewer or observer notes, links to photos, as well as written details on the record. When an observer replies with details, you should ask him/her to add the details into their species comments in their eBird checklist itself. But in case they don't, you should paste them here so that a permanent record of the documentation is maintained within eBird. You (and other reviewers) will be able to see anything that you add here. Again, we encourage you to use this field whenever your review decision requires more detail than is provided in the Reason box.

Review Complete: Are you through reviewing this record? The *Review complete* check box removes records from the queue when it is selected and keeps them in the queue when you review a record and clear the box. Leave the check box selected only when you are finished reviewing the record and are ready to remove it from your review queue. If you want to make a preliminary assessment but leave the record's status *in review*, simply click *Change* and uncheck the *Review complete* check box. This will keep the record in your review list, and you'll be able to sort for these based on the *in review* status once documentation is received or more information becomes available. Once you have completed this record, select *Valid* or *Not valid* and then select the *Review complete* check box, which will remove it from your list. You can always find the record again using the *Search Observations* tab.

A good practice is to query the observer and make a preliminary assessment based on the information that you have. If the eBirder responds with documentation, you can always reopen the record by clicking the checklist link in the email and reassess it.

Invalidating an entire checklist

Sometimes, you will find enough errors in one checklist that you want to invalidate the entire checklist. Click the *Submission ID* to display the full details of the submission. Once displayed, select the check boxes for the species that require action, and then proceed as detailed in "Reviewing Observations" above. If you deem an entire checklist to be invalid (for example, a list-building checklist from a bogus date), select the check box at the top of the column to select all of the species on the checklist, change the Validity to *Not valid*, and then select a *Reason*. Select the *Review complete* check box, and then click the *Change* button.

Reviewing multiple records

Often, you will have several records that you want to approve at one time. This happens most frequently when there are several reports of the same bird by numerous observers. Simply select the check boxes next to each record for which you want to apply the same validity and reason, change the validity and reason, and then click the *Change* button. You can use Shift + click to select a string of multiple records.

Automatic reviews

There are three types of reviews that result in actions being taken on records that bypass your review queue. The first happens at submission if the user submits a checklist at the state-level (i.e., they select "Select and entire city, county, or state" on the data entry page and then chose a state). These records are automatically treated as *Not valid, Location--State Level* since the location of the observations is imprecise and they can't accurately be displayed on a map. The second happens with shared checklists. If you review a checklist and it is subsequently shared with other observers, those review decisions will carry over to the new observers as well. However, if those observers then adjust the species count or location, you will need to re-review the record. Finally, if a user hides his or her checklist, it will effectively invalidate the entire checklist and keep it off all forms of eBird output (the most recent list addition might be visible on the Top100, but it will have no location associated with it). If the user later unhides the record, and it is a rarity for your area, you will then be able to review it.

Submissions from hand-held data entry programs

In spring 2012, in-the-field data entry to eBird became easy. With the release of BirdLog <u>http://birdseyebirding.com/products-pricing/birdlog</u>, many users now submit their eBird checklists directly from the field from their smartphone. Although this process has been carefully vetted and usually works smoothly, please be alert for errors that could have occurred from this data-entry system. If you spot something, email us at <u>ebird@cornell.edu</u> immediately. You can identify submissions from BirdLog in the checklist comments, which read "Submitted from BirdLog".

Submissions from data uploads

Although most submissions to eBird come via the online web application, it is possible to upload hundreds or even thousands of records in a series of several uploads from personal or commercial listing programs. These cases are rare, but when they occur you are sure to notice large pulses of historical data appearing. This can create difficulties for reviewers: in addition to the high volume of new review records, you may find that many of these records have broad-scale location information, estimated dates, imprecise counts, and no effort information. When you spot a set of uploaded records, we recommend you review them with special care. It is important to understand the following:

1) Data entry errors are particularly likely with bulk uploads. Thus, a single transposed line could result in 65 Little Gulls and 1 Bonaparte's Gull (rather than the reverse). Even the most skilled and diligent observers may create such errors without knowing it! Be cautious with accepting records simply because you trust that individual, since any record could be a typo, especially with bulk uploads.

2) Our bulk upload tool does not yet have a data quality validation system that the user sees. An unusual record entered online will ask the user whether she really meant to report 65 Little Gulls. The bulk upload tool will not provide that feedback to the user. For this reason, it is particularly important that you understand the bulk upload process and make observers aware of records that seem fishy or questionable.

3) In cases where a large number of errors come in a single upload, a special email to the reporter may be called for. The following process is one that many reviewers have found helpful. First, identify a list of records that were subjected to review. Second, copy the data into Excel or a similar spreadsheet program (it may be necessary to copy the data first into a text file and then paste into Excel). Third, send the observer the Excel file with comments on why the records are unusual. This provides the observer a chance to see the records that were identified as possible errors, and surely they will want to correct any

errors you have helped to identify. Once the observer has verified the accuracy of the records, you can proceed with the review as described above.

4) One of the most common errors occurs when the observer uses commercial software (e.g., Avisys) but does not have a recently updated taxonomy. Observers should be encouraged to update their taxonomy before uploading to eBird!

5) Upload errors can easily be corrected in the original file and then re-uploaded, as long as the user has not deleted the original file. The original flawed file can then be deleted from eBird.

Also, if an upload from a commercial product seems to be creating problems, please let eBird central know ASAP.

Review Reasons

The most common review reasons are underlined and preceded by an asterisk (*) below. Note that in the Review Tools we discuss records as "valid" or "not valid", while in eBird (e.g., eBird Alerts) we typically use "Confirmed" or "Unconfirmed".

*Documentation--Field Notes: To be used with Valid. Field notes support claimed ID

*Documentation--Inadequate: To be used with Not valid. Response did not sufficiently establish ID

Documentation--Measured: To be used with *Valid*: In hand morphometrics support claimed ID (mostly for difficult *Empidonax*, Old World Warblers, etc.). Almost never used.

***Documentation--None provided:** To be used with *Not valid*. Lack of documentation means that the record must be considered Not Valid. (In this case and in all others below, the decision can be reversed if convincing documentation is received at a later date).

***Documentation--Photo/Video/Audio:** To be used with *Valid*. Photos etc. support ID. If a photo does not support the ID, this is best noted in the "Notes" field after using "Species--Misidentified"

Documentation--Requested: This is automatically set when you click the mail icon and send a request for information. It is OK to request documentation, make a snap judgment, and tag the record to note that documentation has been requested. If you get a convincing response, you can validate; if not, invalidate. This is not used often outside of the automated filter process, but you can (and should) set a record this way if you follow-up for more info outside of the eBird review email process.

*Location--County Level: Generally used with *Not valid*. This is up to reviewer discretion. In some areas, counties are small enough that they could be considered valid (e.g., counties in Georgia). In other areas (e.g., California, where San Bernardino County is bigger than at least a few eastern states!), these are routinely invalidated. These records are not automatically treated by eBird, so will show up in your review queue and you will need to make a call. In general, these records make eBird maps sloppy (especially along coastlines), and we prefer that users submit at finer spatial scales. For all location-based issues like this, we encourage you to try to educate our users about how to plot records more precisely and make their data more useful. It is up to you to decide if it makes sense to invalidate these in your region.

*Location--Imprecise: To be used with *Not valid*. A catch-all for other types of location plotting errors that we don't want to propagate as valid data within eBird. For all location-based errors like this, we encourage you to try to educate our users about how to plot records more precisely and make their data more useful.

*Location--State Level: Used with *Not valid*. We automatically tag all submissions that come in at the state level (via the "Submit for an entire, state, county, or city" option) as *Not valid, Location--State Level*. In other words, reviewers will not find these records unless you search for them. For eBird, state-level submissions have relatively little value, and do not meet our minimum requirements for location

specificity. If you find a record in your review queue that clearly represents a state level submission (users can still plot a point anywhere and call it "Maine"), please invalidate it using this option. Of course, if a rarity is reported, you may want to follow up to find out if it was correct (and maybe encourage them to plot it specifically, if it is correct). Note that species triggering the local filter will still show up for you, even if submitted at the state level. We want you to be aware of a report of a Variegated Flycatcher even if submitted at the state level. For all location-based errors, we encourage you to try to educate our users about how to plot records more precisely and make their data more useful.

***Observer--Building Lists:** To be used with *Not valid*. We do get cases where observers want to create a life list or a state list, plot or select a random point, pick a random date, and submit the full list of what they've seen over the course of a lifetime. Some records from these are usually easily caught by our filters, and the entire list should be invalidated with this reason.

***Observer--Error:** To be used with *Not valid*. This is useful for checklist errors of other types, or other errors that don't fit into easy categories, such as if an observer says they are reporting all species but only entered two species, both of which are rarities that make it clear other birds should have been seen. For misidentifications, please use "Species--Misidentified", and for possible misidentification please use *Documentation--None Provided* or *Documentation--Inadequate*. For selection of the wrong species from taxonomy (e.g., reports of a Common Snipe vs. a Wilson's Snipe in North America) please use *Species--Taxonomic issue*.

Observer--Experience unknown: Should be used rarely, but to be used with *Not valid*. A nice way of saying observer experience not sufficient to support ID. Usually there is a better reason (*Documentation-Inadequate* for example), so this is rarely needed. Perhaps useful for rare "problem observer" cases, where correspondence is fruitless.

***Observer--Experienced:** To be used with *Valid*. An often-used category. Reliable eBirders who routinely provide responses and adequately document birds can reasonably be held to a lower standard for low level rarities or birds known to be present.

Observer--Suppressed: Used with *Not valid.* You do not have an option to set this yourself, but this is the eBird "black list". Occasional incorrigible observers cause eBird more harm than good, either through unwillingness to engage in the review process, unwillingness to improve their eBirding habits or lack of interest in improving their birding skills, or other problems they cause. We can set specific users to have their data auto-invalidated, but we only do this in extreme cases where there is a clear paper trail to document why we are taking this action. Please request it rarely and only with good reason!

Record--Accepted by BRC: To be used with *Valid*. In general, we ask that our reviewers follow the decisions of state Bird Records Committees (i.e., records accepted by BRCs should be valid in eBird, and vice versa). Please see this topic in our Reviewer Document. There is no need to use this category for all accepted records, but if this best describes the reason for acceptance, please feel free to use it.

Record--Date Imprecise: Usually used with *Not valid*, rarely with *Valid*. Use this when an observer submits records form a correct location, but uses a date that is clearly incorrect. Some users submit lists spanning multiple days. eBird does not accept multi-day lists and it is best to invalidate otherwise correct checklists with this reason. In rare cases (for regions with sparse data or checklists with records of great interest), it may be worth accepting these records, taking care to select this reason (*Record--Date Imprecise*). Never accept records where the time period exceeds one week, or the date is uncertain by more than a week. If accepting, also make sure that the checklist does not include false effort information; records spanning multiple days should be entered under the Historical protocol without Duration or Distance. Obvious list-building efforts should be invalidated as *Observer--Building Lists* and incorrectly plotted locations should be invalidated using one of the *Location* review reasons above.

Record--Duplicated submission: To be used with *Not valid*. Identical duplicate submissions (from the same observer's account) can cause minor issues with the bar charts. When found, these should be invalidated with this reason. Observers sometimes cause this by hitting submit twice rapidly. Often the

observer may not know about this, so an email may be appreciated. This SHOULD NOT be used for duplicate lists from different observers, since these are "checklist shares" and are dealt with properly (as a single checklist) in the eBird database. Some observers share with group accounts (e.g., "Lake County Bird Club" or "September Shorebird Survey") that use these accounts to aggregate data for an organization or project; this is acceptable and these should not be invalidated as duplicate submissions (these "group accounts" should set their preferences to not appear in the Top100). Furthermore, some observers may maintain a duplicate account (such as "no playback" or "no heard birds" or "green birding" where they share their own lists). Observers maintain such accounts should do so using the checklist sharing feature. In the future, we hope to develop a better way for observers to maintain such lists, and in the meantime, this is acceptable and not a reason for invalidation as a duplicate list.

Record--In Review by BRC: Can be used with either *Valid* or *Not valid*. This is useful if you make a preliminary decision, but will return to the record once the BRC decides. A holding bin, essentially. You may wish to leave these records in your review queue by not selecting the "Review complete" check box.

Record--Multi-party submission: To be used with *Not valid*. eBird is a system for collecting singleparty checklists. If two or more observers go birding independently, these birding efforts should be submitted separately. If they are not, it is appropriate to invalidate using this reason if the observer is unwilling to correct his or her list. Christmas Bird Count "sector" data is sometimes submitted this way as an aggregation from multiple independent parties, and this is the appropriate way to invalidate those data.

Record--Nocturnal flight count: To be used with *Not valid*. Nocturnal flight call counts should use the special protocol that makes assumptions about counts and detectability that do not affect eBird output. Please ask observers to change their Nocturnal Flight Cal count submissions to this protocol; if they do not, invalidation using this reason may be appropriate.

***Record--Not exceptional:** To be used with *Valid*. Our filters are sometimes imprecise and are always coarse at some level. Some records will be flagged that are really not unusual, either because the location is known for high counts, the counts are just barely above the limit, or it otherwise does not raise an expert's (i.e., your) eyebrows. This is used often, and is appropriate to use in the above scenarios. NOTE: Instead of repeatedly using this reason, please consider adjusting the filter and re-running the data, if the source of the record was a filter error. Maintaining filters is essential to eBird on many levels and will make your future review easier.

Record--Rejected by BRC: To be used with Not valid; see "Record--Accepted by BRC" above.

Species--Exceptional count: To be used with *Not valid*. Basically this is meant to mean "Not a believable count". A count that you believe should be accepted, should use a reason like *Observer--Experienced*, *Record--Not exceptional*, etc.

***Species--Introduced/Exotic:** To be used with either *Valid* or *Not valid*. This is discussed in detail below. Please read this section in full before using this category. In short, we have agreed upon introduced species in the United States that we want to track using eBird output (these should be marked *Valid, Introduced/Exotic*) and those that we wish to track, but do not want to "clutter" the eBird output (these should be marked "Introduced/Exotic" and *Not valid*). Examples would be African Gray Parrot (*Not valid, Introduced/Exotic*), reintroduced Trumpeter Swans anywhere, or Pin-tailed Whydah in California (*Valid, Introduced/Exotic*). Be sure to establish the identification first; a claim of an unusual species should meet the standards for ID first, and anything accepted as *Valid* OR *Not valid* should be safely assumed to be correctly identified. At some point, we do hope to deal with feral / escaped / exotic species in a better way. Tagging them as exotic allows us to find them in the future and correctly deal with them. Note also that records marked as *Not valid* using this reason are provided in eBird Basic Dataset downloads.

***Species--Known to be at location:** To be used with *Valid*. Useful for long-staying rarities, or rare birds that occur at one or two known spots but that are considered rarities in the general region covered by the filter. When using this option for a long-staying rarity, please do make sure that one or more records are

accompanied by documentation (rather than marking "known to be at location" because you or someone else believes it; this should be an evidence-based category).

***Species--Misidentified:** To be used with *Not valid*, in those rare cases where you can be certain that a mistake was made (photo or description, or accounting of events, indicates another species). It is often useful to add a comment to your review decision saying how you know this. Correspondence with the observer is helpful to prevent them from making the same mistake again.

Species--Sensitive Species: To be used with *Not valid*. Use this only in rare, special cases were the sensitivity to disturbance, capture, or other harm means that the location should be suppressed from eBird. Using the correct code here is important so that we can change how these records are handled later.

***Species--Taxonomic Issue:** To be used with *Not valid*. This is meant to be used when an observer has essentially identified their species correctly, but has selected the wrong name due to a taxonomic split. Invalidate these records using this reason and use the reviewer comments field to enter the exact Primary Common Name from the eBird taxonomy that should be used for this record. In the future we plan to update these records using this. For example, often a field guide published ten years ago will use an older name that now represents a more limited population. Common Snipe for example used to refer to the snipe breeding in Eurasia and North America; when the North American bird was split as Wilson's Snipe, the former name was reserved for Eurasian reports. Enter "Wilson's Snipe" in the comments field and please let the observer know about the mistake; on a future date if the observer does not change the record, then we can change it for them.

Search Observations

The search tools can be used to locate records of rare and unusual birds that you wish to put back through the review process, or simply to explore the database. When you click the Search Observations tab, the Search for Observations screen displays with a list of criteria on which to base your database query.

Assignment: Select one of your assigned regions to limit the search to the specified region.

Submission ID: Search for a specific record by entering the record's unique submission ID.

User ID: Search for records submitted by a specific observer by entering the observer's unique User ID (i.e., eBird's Internal ID). To find a User ID, click the user name for any record on the *Search Observations* or *Review Observations* tabs. If you wish to search for records for a specific observer, but cannot locate the User ID, contact Brian at bls42@cornell.edu.

Validity: Select *Valid*, *Not valid*, or neither. Selecting *Not valid* observations will return only those observations that are currently in the review process, as well as those that have been reviewed and deemed invalid. Selecting *Valid* observations will return only those observations that were approved upon submission (not flagged by the automatic filter), or those that were reviewed and deemed *Valid*.

Count Above and Count Below: Allows you to specify a number for the lower and upper limit of reported individuals, limiting the results to those that fall within that specific range.

From date and To date: Allows you to limit the results to those that fall within a specific date range.

Search Across Years (Periodic): Checking this box allows a search to be restricted to a discrete period of the year. For example, to search for all unusually early Barn Swallows in a state or country, just enter the start date (and year) 02/01/1900 and end date and year 04/05/2014, and check the *Search Across Years (Periodic)* box: all records between 1 Feb-5 Apr from 1900-2014 will be searched. To search for all records between 1900 and 2014, just type 01/01/1900 and 06/30/2014 and do not select the check box.

Location Name: Search for records by site name.

County: Search for records from a particular county.

State/Province: Select records from a state or province. Two-letter postal codes can be used.

Country: Search for records from a particular country. If you entered a State/Province, you must select a Country.

Species: Select a species by typing any part of its name. Be sure to click the species name to select it. You can select several species if you wish.

Reviewing from an eBird Checklist

The Review Tools search pages have limitations. For instance, it is not possible to search for all April records of Swainson's Thrush in Iowa across all years. It is also not easy to find all inland records of Common Eiders in New England for large counties that touch the coast. Both of these are easily addressed in eBird output, which is another entry point for review.

The eBird *View and Explore Data* pages are useful ways to look for errors. When you're logged in to eBird, *any time you view a checklist link from one of these pages, you can review the records if you have editing privileges for that region.* You have the option to *Review List* (which brings up the whole checklist) or to *Review* the record. In general, we recommend always selecting *Review List*, since it makes it easier to access the other records on the checklist. The image below shows these two buttons; if you don't see the buttons, you are looking at a checklist from outside your review area.

Note: These checklists include all species reported by the observer, including those that may have been deemed Not valid.

Checklist	S9485948	
Location	Cape IslandCMMBR (Cape May Migratory Bird Refuge (Meadows)), Cape May County, New Jersey, US $_{\rm (Map)}$	
Date and Effort	Mon Nov 10, 1997 5:00 PM Protocol: Incidental Party Size: 1 Observers: Marshall Iliff	
Species	 Brown-chested Martin (fusca) ***mega; lifer; first found over the weekend; I have a sketch from my observation on this date, but i seen extremely well and photographed by many at the Beanery the next morning. 	Review List Review t was
	Are you submitting a complete checklist of the birds you were able to identify? No	

Using eBird's Explore Data Tools for Record Review

The Review Tools are certainly not the only way to identify suspicious or unusual records. The various data exploration tools available under the *Explore Data* tab are all invaluable for identifying unusual records. Consider the following options:

- Create a bar chart for your region and look for unusual records or records out of the normal date range. If you then click the *Map* link, you can access the point maps (you may need to zoom in and click *Show Points Sooner*. Click on any suspect point to access more information and a checklist link, from which you can review the record.
- If you refine the date range of the bar chart to a certain date range (e.g., April), then you can click the *Map* link and see only those records from April. This is useful for seasonal reviews.
- Use the point maps to look for records out of the usual zone of occurrence, coastal birds plotted inland, or terrestrial species plotted offshore. Again, by clicking on points you can access the checklist link and review directly from there.
- Visit the firsts, lasts, and high counts tables. Since these capture the extreme dates and extreme high counts, they are particularly useful for identifying erroneous records. To review the records you will have to find the checklist link using the bar chart/map method described above.
- Sign up for a *Rare Bird Alert* for your review region and you will get email notification (hourly or daily) with checklist links that you can use for review. This is a very useful way to keep up with incoming records and to be promptly notified of rarities submitted.

If you find unusual records using the maps, bar charts, or other output tools, you can also search for them in the eBird Review Tools. Try using the Search tab to pull up all records of the species (or all records from a certain date span or county). Then sort by date or county and you should be able to quickly find the records that you identified as suspect. Review them as you would normally.

In some parts of the US and Canada, there will be species that overlap in their distributions, provide challenges to the casual observer, and will not be flagged by the filters. For example, where ranges overlap for Black-capped and Carolina chickadees in some eastern states/counties, users might have to search for these records manually to ensure that none are way out of each species' typical range. Try making a point map for the species in the state to search out records that seem out-of-place.

Miscellaneous eBird Policies

Correspondence

We also ask that you please keep in mind that you are likely to be corresponding with observers of all skill levels. Since skeptical inquiry about bird sightings can offend some people, please do your best to keep your inquiries respectful and tactful. Our automated email is usually well-received and is a time-saver in the review process, but feel free to use all, some, or none of it in the email you send to eBirders. Often it is helpful to explain at the top of the email exactly why the species has raised questions.

It is also important to state that eBird review is a privilege and those who use eBird have agreed to be contacted by reviewers regarding eBird records as part of the eBird privacy policy (http://ebird.org/content/ebird/about/privacy/). However, it is not appropriate to contact users under other pretenses as this would violate our privacy policy. Contacting users via email addresses that you accessed via eBird review privileges to sell birding tours, books, or other products is not appropriate under and circumstances. You may include personal websites, business websites, etc. as part of your email signature, but overt marketing to eBird users is not appropriate.

Be Nice

This should go without saying. We expect civility from reviewers and eBirders. Reviewing records is not simply a matter of quietly going through and validating and invalidating records. Rather, our strongest regional editors take time to build relationships with our users and help them improve their birding skills and eBirding abilities. You will become one of the primary points of contact between eBird and our user community. Please do what you can to encourage users in a supportive manner and help build the eBird

community. People make mistakes. We encourage you to contact and assist them. If you continually invalidate records without letting people know, they are unlikely to learn, will keep making the same mistakes, and this will ultimately take more of your time. Be tactful when sharing information about an observer's reputation, reporting history, or identification for a species record. We have very high expectations for reviewers to be professional and polite. Reviewers who do not treat users with respect will have their review privileges removed. Similarly, we expect the same from eBirders—if you believe a user is not treating you professionally or with respect, please document the instance by saving those emails and send them to one of the eBird staff members. If we are not able to improve the situation, we may blacklist that user (see below). Blacklisting is always a last resort and we have found that in almost all cases, we can remedy the situation in some other way. Threats of any kind from eBird users are not tolerated. If you receive a threat of any kind, notify eBird staff immediately.

Blacklist

In extreme instances, some eBird users are not a good fit for eBird. This can be because the individual reports rare birds at a rate that strains credulity, because he/she refuses to engage with the review process, or simply because he/she has shown a pattern of rude or abusive behavior. When an individual shows signs of causing eBird and the review community more harm than good, we always send a warning letter informing the individual of potential account suspension. If the behavior persists, the individual may be blacklisted. This process removes their records from all output and marks them in the database as "Observer--Suppressed".

Intentional falsification does occur; please refer to **Appendix B** (Falsification of documentation and how to detect it). eBird has a zero-tolerance policy on the intentional falsification of documentation. Every case needs to be dealt with on an individual basis, and some cases (e.g., young children) may be worth rehabilitating. But the official eBird stance is that a single proven instance of falsification of documentation is justifiable grounds for blacklisting. If you request such a case, please do provide documentation that proves the falsification.

Note that the blacklist is not intended for novice/beginner birders. We believe that eBird can be used and enjoyed by birders of all skill levels; honest mistakes are best addressed with the existing review process. Usually, observers learn quickly, especially when given constructive feedback.

Trespassing and other illegal activity

eBird reviewers are not the police, and we expect reviewers to review records based on their merits and leave legal issues up to law enforcement. If a bird was found illegally or unethically, that should have no bearing on its scientific validity. If a rare species of interest to birders is present in an area that is not open to the public, it is OK to leave that record unconfirmed or to temporarily invalidate it using the reason *Species—Sensitive Species* until the bird no longer presents a temptation to would-be chasers.

Transparency

The eBird review process is not necessarily transparent to new users. There is no easy way for them to see which records of theirs have been treated as *Not valid*, and no way for them to see the reasons or comments for the review. However, we do ask that you keep your comments professional and relevant!

Some eBird users watch certain eBird output tools to see whether their records have been validated (e.g., Alerts). Other users may watch the point maps to see if their record appears, and flagged records will only appear after being validated by you. Whenever possible we encourage you to correspond honestly with users to explain why their record won't be shown, but that it will always be accessible in their personal records. We find most users to be receptive to this and understanding of the scientific process and need for data quality review.

Timeliness

We consider punctual review to be important and urge you to review your records at least once a week, if not daily. Almost all eBird output (maps, bar charts, and arrival/departure tables) excludes records that have not been reviewed or have been invalidated; only validated records are shown. Consequently, users may notice their missing records. And valid records will be excluded from our bird occurrence summaries if review is not timely. eBird is bringing birding into the information age and several of our tools, and many of those we are currently developing, depend on the ability to get bird information quickly, or even in real time. There are exceptions, such as eBird Alerts that do provide near real-time lists of all records reported to eBird. If the species is flagged, it will be noted as unreviewed. If you review it and believe it to be invalid, it will be removed from *all* eBird output.

We also understand that real life may occasionally get in the way and the world (even the bird world) will not stop spinning on its axis if your review list backs up a bit. If you work as a team with another reviewer, please consider having that person pick up the review process while you are away. If not, don't stress about it! It may be worth alerting the local birding community that eBird reviews will be on hold until you get back. Please do suggest other people who could help with the review process.

Should reviewers review their own records?

eBird reviewers such as you are regional experts with an interest and expertise in judging local records. We expect eBird reviewers to review their own records and to treat their own records objectively as they treat the records of others. Therefore, we trust you to act upon your own records in your region. However, when your review privileges extend outside of your primary area (for example, if you review in the southeast section of a state, but you are able to review records elsewhere in the state), or when you work as a team with other reviewers, it is preferable to have a different individual act upon your records whenever possible. This ensures greater objectivity and protects against claims of bias in how these records are treated. So please try, when possible, to leave your own records for others to deal with if there is another reviewer with access to review your records.

What happens to these data?

Please understand that none of the data that you review will be deleted. What you are doing is deciding whether data appear, or do not appear, in the eBird public data output. When a record is validated it is exposed to the public; when it is invalidated it is hidden. All data are stored in perpetuity in our database, and can be explored, validated, or invalidated in the future. Invalidated records still appear in the user's personal lists and they will not be aware that the record has not been validated (unless they notice it lacking from a mapping tool or other form of output).

One of the primary goals of eBird is to facilitate and support existing networks that deal with bird records. These include, but are not limited to, state and provincial Bird Records Committees, North American Birds (journal of record for bird sightings across North America), state or regional journals such as The Kingbird (New York), Maryland Birdlife, or The Loon (Minnesota), state natural heritage or endangered species programs, and much more.

Ultimately, we view eBird as a hub for bird sightings from birders. If all birders were to send their sightings to eBird, then eBird should feed those data back out to groups that draw upon the data. The eBird review process provides a first level of quality control and these groups may perform additional vetting of records. Regardless, this adds importance to your task since these data may be used elsewhere.

Archival of documentation

Appendix A discusses how to use the eBird Flickr Group as a means of archiving documentary photos of rarities submitted to eBird. We believe that maintaining this archive to support reviewers' decisions is important and we encourage you to make use of this strategy for archiving eBird documentation. Please

note that images of sketches can be archived here as well. We also encourage you to train users to embed photos and the link for how to do that is contained in all requests for documentation sent from the eBird review tools. Here is the link: <u>http://ebird.org/content/ebird/about/embedding_richmedia</u>.

IMPORTANT NOTE (January 2015): eBird is changing how it handles rich media and by the middle of 2015 we expect to be implementing a new system. As this new system is implemented we will revise this document to address new ways of dealing with reviews pertaining to rich media (photos, audio, video).

Records Committees

You will undoubtedly encounter birds reported to eBird that require review by the local records committee. It is very important that our eBird Reviewers cooperate with the local Records Committees, so please pass any documentation you receive (photos, descriptions, or simply information on the report) to the local Records Committee so that they can follow-up on the records and review them.

Please do your best to follow the decisions of the local records committees. For species subject to committee review (i.e., on the local "review list"), please try to ensure that the records reviewed by the committee are treated consistently within eBird. We strongly believe in the value of records committees, both for their archival role in collecting, filing, and preserving the body of documentation supporting rarities, and for their role in providing timely, expert review. In general, an important record adjudicated and validated by a committee of regional experts is stronger than a record assessed by one individual. Although bird records committees may occasionally be influenced by personal relationships or politics, we do feel that eBird will be best served by following their decisions.

However, it is also important that eBird information flow rapidly and not be delayed by waiting for committee action which can take months or even years (!). Please do use your judgment to make an initial judgment on any current rarities. If a Ross's Gull appears in your area and is photographed and seen by hundreds, you need not await the records committee's endorsement to validate it. Likewise, if you have good reason to feel that a reported Brown-chested Martin was really a Purple Martin, please do not hesitate to make that judgment. But please do stay abreast of the records committee decisions and reverse your action if your assessment and that of the records committee differ (these cases will be rare).

If you strongly believe a committee has erred in the treatment of a record, we encourage you to promote the re-review of the record by the committee. Write a statement defending how you would treat the record and submit it for consideration by the committee. And if you depart from a committee decision with your eBird review (which we do not recommend), please be sure to provide extensive commentary within the record to defend your departure from their decision.

Exotic species

The discussion below pertains mostly to the United States and Canada, but the general philosophy should be applied globally. We defer to local managing organizations to establish lists of species that should be validated versus those where records of escapees are isolated and should not be considered valid records in the eBird database. Please consult with us if you have specific questions about how to apply these guidelines in your region.

We believe that *it is important and useful for birders to report exotic birds*. For example, eBird provides an extraordinary illustration of the spread of Eurasian Collared-Dove across the United States, and it is a valuable tool for understanding how other exotics expand or contract their ranges. Tricolored Munia is expanding in the Caribbean and Central America and has already reached the United States; Scalybreasted Munia is breeding in the wild and expanding in southern California; Rosy-faced Lovebird populations are on the rise in southern Arizona; and Monk Parakeet populations are in constant flux in many cities. The ABA Checklist Committee has recently used eBird data on Scaly-breasted Munia and Rosy-faced Lovebird (and several other species), to add those species to the accepted list of established exotics in the U.S. and Canada. Importantly, downloadable eBird data (<u>http://ebird.org/ebird/data/download</u>) include records marked as *Not valid* with the reason *Species--Introduced/Exotic*; this is the only case where we provide *Not valid* data in these downloads.

However, a much thornier issue is how to treat records of other escapee species within the eBird review process. We lay out some guidelines below:

1) Be sure to review the identification of exotic species first; if the identification is not acceptable, there is no need to consider the exotic/introduced status!

2) Any exotic population accepted to the state or regional list should be reviewed and validated within eBird just as you would for a native species.

3) For the following species, which are showing expanding populations in North America, we recommend that all records be reviewed and validated as for native species within the specified region:

- Trumpeter Swan--Anywhere it occurs, including recent reintroductions
- Mute Swan--Within the Northeast, Great Lakes, and Upper Midwest
- Monk Parakeet--Anywhere free-flying birds occur
- Rosy-faced Lovebird--in Arizona (even beyond the "established" population)
- Eurasian Tree Sparrow--Anywhere free-flying birds occur

4) All other examples, including escapee waterfowl, parrots, and songbirds, as well as submissions of all "Domestic type" species (Graylag Goose, Muscovy Duck, and Mallard), should be treated as "invalid" with the reason *Species--Introduced/Exotic*. For example, a Red-lored Parrot in St. Louis, while interesting, should be marked *Not valid* and *Species--Introduced/Exotic* within the eBird Review Tools. If an expanding exotic species warrants tracking in eBird, please do search for those records, and validate them. When those populations show signs of increase (or are accepted to the state list) it will be easy to search for them all and change their validation status.

5) In certain "exotic bird regions", we recommend treating a larger slate of species. Which species are tracked using eBird should be at the discretion of the reviewers in those areas. Please be aware that this will mean that state bar charts and maps show large number of exotic species, but this is, in fact, an accurate representation of the avifauna. Tracking these species using eBird will be really valuable to our understanding of the distribution and occurrence patterns for these species. Please also encourage birders in your area to report exotic species on all outings, and in those areas they should consider the question "Are you reporting all species" to include both native and non-native species. The regions below each maintain a list of exotic species to track with eBird; please get in touch with us to obtain this list if you are a reviewer in those regions:

- Hawaii
- Florida
- California
- Texas

6) There are a few species that have been inconsistently treated by bird records committees (BRCs) as possible escapees, with some committees treating all occurrences as wild, and others treating all occurrences as escapees. For example, as of 2008, Barnacle Goose was treated as wild in Pennsylvania, but as an escapee in adjacent Maryland. Although we support the decisions of BRCs as outlined above, the inconsistent treatment of species such as Barnacle Goose actually obscures the very patterns of occurrence that can be useful for records committees to assess the wild status of these species. The U.S.

Barnacle Goose bar chart shows a pattern very similar to that of other migratory geese, mirroring that of Greenland Greater White-fronted Geese. Only by validating ALL records will patterns become apparent through eBird tools. Thus, for species with "mixed" treatment by BRCs, we recommend erring on the liberal side (i.e., it may be appropriate to depart from the BRC for these records).

In cases where the bird is *known* to have escaped from captivity, or where there is strong circumstantial evidence that the individual was an escapee (unusual behavior, unusual plumage/molt, etc.) we recommend that the record be invalidated with the reason *Species--Introduced/Exotic*. However, in all other cases *regardless of location or time of year*, we recommend that these species be treated as valid: Barnacle Goose, Pink-footed Goose, White-cheeked Pintail, Garganey, Baikal Teal, Falcated Duck, Black-bellied Whistling-Duck, American Flamingo, Crested Caracara, Harris's Hawk, Monk Parakeet.

If you believe it is an escapee, but have no strong evidence to support your position, this is the one case where you should use the code *Valid* and *Species--Introduced/Exotic*. Please be sure to include some written comments explaining your treatment of the record. This will not affect current output, but in the future we expect to build tools that will take this *Species--Introduced/Exotic* coding into account.

Invalidating captive species

eBirders occasionally report captive birds from zoos, wildlife parks, or waterfowl collections. This is obviously not appropriate, since eBird is intended to collect information on free-flying birds. When invalidating such records (or often, complete checklists of all species seen in captivity), **please make sure not to use the** *Species--Introduced/Exotic*. Instead, please use *Observer--Error* and include comments that these are captive birds or a checklist of caged birds from a zoo. This is important because our data downloads do include invalidated records of birds marked "Species—Introduced/Exotic" since some researchers study how these non-native species expand and interact with native species.

Wild birds in buildings

Occasionally wild birds end up inside buildings where they may spend the winter. These records should be accepted unless there is strong evidence that the bird did not arrive there on its own. For instance, a hummingbird captured and moved inside a greenhouse by a person, should not be accepted (this is usually illegal). If, however, the hummingbird appeared inside the greenhouse on its own, the bird should be accepted.

Feedback welcomed

Thanks for participating in eBird and for reviewing records for your region. We appreciate your expertise in helping us keep the data to the highest standards. Without your help, eBird would not be possible! If these instructions are unclear in any way, we want to hear from you so that we can improve them.

Thank you for your time and effort!

Team eBird

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Part II: Filter Creation and Editing

The eBird filters serve two purposes in eBird: they provide the basic checklist for data entry and also perform quality control. They control the quality of the data coming in to eBird from its users by automatically flagging records for review that are unusual by being out of range, unseasonal, or reported in atypically high numbers. The way the filters work is that for the region specified by the filter's name (e.g., Rhode Island; San Diego County, CA; or South Texas Brush Country), upper limit values are provided for each species and its unique temporal window. When filter limits are eclipsed will result in the record being "flagged for review." These records are placed in a queue of records not available to the public until being cleared or rejected by a regional editor (in this case many of you serve also as our regional editors).

The idea with the filters is to strike a balance between allowing people to report numbers of birds typically encountered in the region in a day's birding, while weeding out records that would raise eyebrows if reported on the local listserv or on rare bird alerts. We'd like to have any records that you feel need peer review or independent verification to be flagged for review in eBird. We encourage conservative filters, but it is also a balance since tight filters mean a higher workload of records that will need to be reviewed.

Please remember that the filters control what the user sees on the checklist. The eBird checklist interface has two states—"Most probable" species and "Rare species"—with the former including every species set at a 1 or higher for that date, and the latter including every species set at zero. If there are birds that really should be on the main checklist entry page, you should make sure their filter limits are set at 1 or higher. Sometimes you still want to review all records, even though the species is expected enough to be on the main checklist page. Often a good compromise is to set the filter limit at 1, ensuring that the species appears, but if anyone reports more than one, the record will be reviewed.

In August 2012, the filter system changed entirely. What formerly had been a simple grid with a value for each of the 12 months of the year was revised to a dynamic system with adjustable daily filter limits. Since this system is new and much more complex, a complete guide to its use is below.

Filter Philosophy

The mechanics of filters work is quite simple. If for example, from 1-4 Northern Shrikes is an acceptable number to see in a single day in January in Ontario, but five is pushing the limits of what is credible without peer review, documentation, or further details, then the upper limit should be set at 4 for January for Northern Shrike in Ontario. All reports of 5 or more Northern Shrikes will then be flagged for review in eBird, and not made available to the public until vetted by a regional expert. It gets more complicated with large numbers of bird such as waterfowl, many of which occur at relatively few points within a large geographic are covered by the filter. Just do your best. For example, if any number up to 10,000 Redheads wouldn't make you raise an eyebrow, but any report of more than 10,000 might be questionable, then set the limit at 10,000. Any whole number can be used for a filter limit. For moderately rare species with a high error rate (i.e., Northern Goshawk or Common Raven in some areas), you may consider setting the filter artificially low to try to detect the errors.

Your Filters

If you have privileges to edit a filter, it can be edited online in the Review Tools pages. The filters are living documents, and the species under review can serve as a guide for where to set the filter limits. You can view the eBird filters for your region by clicking the *Filters* tab at the top-right of your screen or by accessing this link: <u>https://ebird.org/admin/filterList.htm</u>. This will open a list of all the filters you have

the privileges to edit. To see all filters (perhaps to compare filters from nearby areas) you can click the *All Filters* button at the top-right of the page and scroll (or search) the entire list of filters. The column headers can be used to sort your list of filters and the *Find a Filter* box allows you to quickly search for a specific filter.

Editing a Filter

When you click on the blue filter name, you will see a page that looks like this. There is a lot that can be done from this page.

Copy to Filter Delete Add Spe	ecies Filt	er: Type	to filter	species.						274 sp	ecies (+16	other tax
		JAN	FEB	MAR	APR	MAY	JUN	JUL A	UG SEP	ост	NOV	DEC
VATERFOWL												
Tundra Bean-Goose Anser serrirostris	+ 1	JAN 1						0				
Greater White-fronted Goose Anser albifrons	+ 1	JAN 1		0		APR 24 7	JUN 1	JUL 17		0		
Emperor Goose Chen canagica	+ 6	JAN 1	0		MAR 18 100	MAY 1 500	JUN 1	200 AI	JG 1 50	00	NO	V 17 0
Snow Goose Chen caerulescens	+ 6	JAN 1		0	·	APR 17	10	JUL 14	AUG 18 300	SEP 28	0	
Brant Branta bernicla	+ 6	JAN 1		0		APR 1MAY 1 20 100	JUN 1 500	JUL 1	30		NOV 1NOV 10	/ 16 0
Cackling Goose Branta hutchinsii	+ 6	JAN 1		0		APR 17	2	JUL 15		0		
Cackling Goose (Taverner's) Branta hutchinsli taverneri	+ 1	JAN 1		0		APR 17	2	JUL 15		0		
Tundra Swan Cygnus columbianus	+ 6	JAN 1		0		MAY 1 40	JUN 1	JUL 17		0		

Starting at the top-left of the page, here is what you can do:

- The name of the filter can be edited by clicking Edit Name. Please give your filters names that correspond to those used elsewhere in the filter list. For example, "Texas--El Paso County" is standard format. Note the *double* dash.
- Each filter has a description. These are often blank (for older filters) and recent filters may have data automatically added. Click *View/Edit* to document who worked on the filter and when.
- Each filter also displays the regions it is currently applied to. If you click *3 Regions* in the above image, you will see the three areas that the filter is applied to and their names and codes. It is very important for you to double-check to ensure that the filter is properly applied. If you spot an error, let Marshall, Chris, Brian, or Ian know. Any filter that is applied to at least one region is labeled Active; if it is not yet applied to a region it is Not Active.
- The "< Filters" button returns you to the filters page.

The following options are on the top-right of the page:

• Save -- This button is activated (becomes bright blue) only when changes have been made. Be sure to save after completing your filter editing! It is best to save intermittently as you are editing a filter.

- **Revert** -- This button is used to clear any unsaved changes and return to the latest saved version. It is effectively a Reset or Cancel button. This button is active only when changes have been made and not yet saved (i.e., the Save button has not been activated). You cannot revert to a previous version once your current changes have been saved.
- **Run** -- This button is used to run all existing data through the current filter. Note that this is an important part of the filter process. You can run the data, see what records are flagged, make corrections to the filter, and then run the data again. This will remove the flagged records from your review queue and they will be assumed to be valid if they do not exceed the filter limits.
- **Copy** -- This button creates a copy of the ENTIRE FILTER. This can be a useful starting point for creating a new filter. For example, if the current filter is applied to two counties, and you'd like to give each its own filter, you can create a copy of the existing filter and then rename each filter (the original one and the new one) to indicate each specific county. Then edit each as needed and let Team eBird (Brian, Chris, Marshall, and Ian) know how you would like the filters applied. Please supply the county codes (such as TX-101). You can find these codes in the bar chart URL or in the "regions" link for existing filters.

The CENTRAL GRAY BAR provides the following actions:

- **Copy to Filter** -- The *Copy to filter* button allows you to copy species names and their filter limits to any other filter you have privileges to edit. For example, if you added several subspecies to a filter and would like to apply them to other filters in your area, you can select them all and then click *Copy to filter*.
- **Delete** -- This button deletes all selected species. Please use this button with care. Once a species is deleted from a filter, all reports of it will pop up for validation as new reports are submitted and if the data are rerun.
- Add Species -- This option provides a taxonomic search as on the eBird range maps. You can add any taxon from the eBird taxonomy. Note that if you type "Hawk" you will get all birds with "Hawk" in the name. If you type "Song Sparrow" you will not only get Song Sparrow but all of its subspecies groups, which you can then add to your filter. Once added, you can easily copy the filter limits from the parent species (Song Sparrow) to the subspecies that you just added.
- Filter -- This box allows you to quickly find a species on the filter and view only that species filter limits. Typing Fox Sparrow will show that species and all the subspecies on your filter, since all have Fox Sparrow in the name. You can also use this to view all species with "warbler" in the name at once, which is sometimes helpful.
- **Totals** -- At the far-right of the bar, the total species count is displayed along with other taxa (subspecies, hybrids, intergrades, intergrades, spuhs, slashes, domestics, and forms).

The SPECIES LIST is where most filter editing is done. The filter is completely interactive and most changes should be intuitive. Some controls are to the right of the species name, while the most common ones are within the monthly limits and can be slid back and forth. Here is a guide to your options:

 Greater White-fronted Goose
 + II
 JAN 1
 MAR 1
 APR 1
 MAY 1
 JUN 1
 OCT 8

 3000
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• Change or delete count limits -- Simply click inside a filter limit to change it. Once you do, you can type a new number or click DELETE. If you change a number to be the same as an adjacent number, eBird will automatically merge the two when saved. Thus, in the following example, if the May 1-June 1 period is changed to 0, then the new summer range will have a zero from May 1-Oct 8. When you delete a limit, it will adopt the count limit to the *left* of the former period. Note that after this happens, you can easily drag the bar to change the date.

Cropter White frented Cooper	+ 🖬 JAN 1		MAR 1	APR 1	MAY 1 JUN 1		OCT 8
Greater White-fronted Goose	3000	3000	500	10	1	0	3000
Snow Goose	JAN 1		MAR 1	APR 1	DELETE JUN 1	SEP 25	
	T I	3000	500	50	DELETE	0	3000

• Change date limits – When you hover over the divisions between date ranges, your cursor will change to allow you to drag the vertical dividers to the left or right. In the example below, the spring departure of Greater White-fronted Goose was adjusted. Note that once changes have been made, a blue star appears to the right of the bird's name, indicating that you have changes that need to be saved. Please remember to save periodically and especially before leaving your editing session!

	*	IAN 1 MAR 1 APR 1		APR 1	APR 22 MAY 6		OCT 8	OCT 8	
Greater White-fronted Goose	* * 4	3000	500	10	1	0		3000	
Snow Goose	L E	JAN 1	MAR 1	APR 1	MAY 1	JUN 1	SEP 25		
		3000	500	50	1	0		000	

• Add date range – Click the + symbol to the right of a bird's name to add a filter period. Note that you only add one date, so the period will be added to the left of the next chronological period. In the example below, a filter period is being added with a beginning date of Oct 1 and a value of 2. The period will extend to (but not include) Oct 8. Note that if a period were added starting Oct 15, the end date for that period would be Dec 31. To add a filter period that starts on 1 January, it may be necessary to add a limit and then correct both filter limit values (i.e., in the example below, add a limit for 15 Feb at 1000, then correct the values for the Jan 1 - Feb 14 period and the Feb 15 to Mar 1 period).

Greater White-fronted Goose	+ 1	JAN 1 3000	MAR 1 APR 1 500 10	APR 22 MAY 6	0	CT 8 3000
		Add count limit:		2 Add Limit Close		
Snow Goose	+ 1	JAN 1 3000	MAR 1 APR 1 500 50	APR 23	SEP 25	3000

• Copy dates and filter limits -- Click the Copy icon to the right of a species name to copy the filter values exactly as they exist to another species. In the example above, clicking the Copy icon for Snow Goose will apply the limits of 3000, 500, 50, 0, and 3000 to any other species you select. To do this, click the Copy icon, and then select one of the following two options: 1) *Copy to existing* or 2) *Copy to new. Copy to existing* lets you select one or more existing species to copy to. *Copy to new* allows you type a new species name and apply the filter limit to that species. This latter option is especially useful for adding subspecies since they also take their parent species' values. Note that in either case, it can be helpful to copy the values as a starting point and then to edit them afterwards.

The August 2012 Filter Adjustment Process

When the new filters were implemented, we did not want to leave the existing monthly values in place. Instead, we opted to adjust filter limits to approximate regional arrival/departure dates as a starting point from which to make further edits. Often these values were not correct, but they were no less accurate than the original monthly limits.

Many filters still exist that have the original values (some dating to 2003!) and have not been edited. You can often tell if a species has been adjusted by whether or not the start/end dates fall on the first of the month or not. Those that have been adjusted may need review, but those that have not been adjusted (e.g., rarer migrants) should certainly be reviewed and set to more accurate migration windows.

Thus, it is important to understand the rules we applied to create these values:

1) We applied the adjustments to species (and their daughter subspecies) only in the US and Canada.

2) We calculated 10% of maximum frequency by region, usually breaking large states into two to four regions and small states into one or two regions. Maximum frequency is defined as the highest frequency reached during a year, and we then take the first point to hit 10% to represent an arrival date and the last point to represent a departure date.

3) After calculating these values, we applied them only on inflection points (when a filter goes from zero to an integer) and only when the calculated point fell within 2 weeks of the inflection point. Thus, if a species had a value of 10 starting on March 1, with February set at zero, we would recalculate the arrival date if the calculated inflection point fell within two weeks of March 15.

Running and Rerunning Data

One of the best tools in a filter editor's arsenal is the ability to run the region's eBird data through the filter, adjust the filter, and then re-run the data again. When you request a data rerun you will receive an email notification that the run is complete, along with statistics from the data re-run (i.e., # of records added or removed). By checking records from the review region, you can then adjust the filters as needed and again run the data to remove or add more records. This is a very helpful way to process the data and helps to create the most accurate filters.

IMPORTANT NOTE: As of January 2015, rerunning data will also rerun records that are *in review* (we hope to resolve this soon). Thus, if you are reviewing a record that was flagged by filters, but which would not be flagged by the filters after a data rerun, the record will be treated as *Valid*, *Unreviewed* after the data rerun and will disappear from your review queue. This is rarely an issue, but for reviewers that keep many records *in review* to keep them in view (not recommended in general), these data reruns can make records disappear from your *Review* page. If you have no records marked *in review*, this is not a concern.

Kiosk Filters

In addition to state, county, and other regional filters, some regions in the U.S. and Canada may be governed by filters developed specifically for a certain refuge or park that has purchased an eBird TrailTracker (or eBird kiosk). These use a customized filter for the specific park and sometimes are initially developed by park or refuge personnel. As an editor for the area, you should be able to review these filters as well. If you cannot, please get in touch.

Non-species on eBird Filters

The use of non-species taxa on eBird filters is one of the more confusing and complex aspects of filter creation and maintenance. Below we give formal recommendations for non-species taxa to include on eBird filters for the United States and Canada; for other regions these examples will set good guides for the logic that should be put in place for similar cases elsewhere in the world.

We also have a spreadsheet associated with this document that categorizes all eBird non-species taxa by the four categories below in the ISSF (subspecies group) example. US and Canada editors should please refer to this document and strive to make your filters consistent with these recommendations.

Non-species taxa fall into seven categories: form, domestic, ISSF (identifiable sub-specific form, also known as subspecies group), hybrid, intergrade, spuh, and slash. This document provides recommendations on all of these.

Our "Non-species recommendations for North America" spreadsheet gives formal recommendations for ISSF (subspecies groups) in the US and Canada. Get in touch directly with Marshall Iliff (<u>mji26@cornell.edu</u>) with questions; when clarification is needed he will summarize for the eBird Regional Editor discussion group.

Subspecies groups or ISSFs

The eBird/Clements Checklist has unique subspecies groups wherever a named sub-specific taxon (subspecies, or group of subspecies) is distinctive and safely field identifiable (by plumage or voice) or in rare cases—when genetic work unambiguously shows its distinctiveness. Subspecies on filters fall into four groups:

Group a – **Always include.** Multiple subspecies groups occur widely and are easily field separable with characteristics well-known; eBirders should be encouraged to report these to refine temporal and spatial distribution. Including such entries is particularly important for species that are likely to be split.

Examples: Cackling Goose, Willet, White-breasted Nuthatch, Palm Warbler, Fox Sparrow

Extended example: The Boulder County, Colorado, filters should include entries for "Fox Sparrow" and for "Fox Sparrow (Slate-colored)," and "Fox Sparrow (Red),", but should not include "Fox Sparrow (Sooty)" and Fox Sparrow (Thick-billed)", which do not occur.

In some cases, multiple subspecies groups occur continentally and are easily separable, although they rarely overlap or overlap only in narrow areas. Even in areas that have little likelihood of occurrence of more than one subspecies (or subspecies group), having the subspecies (or subspecies group) entry available with the same filter limits as the species entry on local filters provides for accurate range maps and educates users on important differences within such species. Including these is most important in overlap areas.

Examples: Mallard, Downy Woodpecker, White-breasted Nuthatch

Extended example: "Mallard (Northern)" should be an option on all Canada and United States filters with the same filter limits as the "Mallard" entry on individual filters. While there is no reason for Newfoundland filters to include the "Mallard (Mexican)" entry, most southwestern United States filters should include four Mallard entries: "Mallard," "Mallard (Northern)," "Mallard (Mexican)," and "Mallard (Mexican intergrade)," the last because hybrids are frequent. This treatment is necessary in filter regions in which both "Mallard (Northern)" and "Mallard (Mexican)" occur regularly, because in a checklist including entries for "Mallard" and "Mallard (Mexican)," but with no entry for "Mallard (Northern)," future researchers would be unable to determine to which non-specific category birds included in the "Mallard" entry are referable, or whether those birds were simply not identified to subspecies.

Group b – Always include in localized areas. This group of subspecies should always be included in areas where multiple taxa are a concern, but since one subspecies is widespread and can safely be assumed in most regions, we do not require it across the continent.

Examples: White-winged Scoter, Osprey, Eastern Screech-Owl, Red-winged Blackbird

Extended example: 1) The Monroe County, Florida, filter should include entries for "Osprey," "Osprey (American)," and "Osprey (Caribbean)," as the vast majority of Ospreys in the filter region are referable to "Osprey (American)," but individuals referable to "Osprey (Caribbean)" are of rare occurrence. However, most other Canadian or United States filters need include only the "Osprey" entry as the likelihood of occurrence of a subspecies other than "Osprey (American)" is extremely remote, at best.

Group c – **Reviewer discretion.** Sub-specific taxa in this group can be included at the discretion of the reviewer. Some of these are obscure, rare, or poorly known, so we leave it to reviewers to monitor whether these options are being used, or would be valuable to promote, in a region.

Examples: Double-crested Cormorant, Horned Lark, Eastern Towhee

Extended example: Many Georgia and Florida filters could include entries for "Eastern Towhee," "Eastern Towhee (Red-eyed)," and "Eastern Towhee (White-eyed)," but there is no reason for such treatment in Ontario. However, those filters that include "Eastern Towhee (White-eyed)" should certainly also include "Eastern Towhee (Red-eyed)" (see Extended example in Group a, above, for similar treatment).

Group d – **Not recommended.** Multiple subspecies groups occur globally. Although the North American form may be distinctive, the subspecies ranges are clearly defined and do not overlap. It is not important to include it on the filter unless another form also occurs.

Examples: Long-eared Owl (American), Northern Shrike (American)

Extended examples: As far as is known, there are no United States or Canada records of Old World taxa of species such as Long-eared Owl and Northern Shrike, so all occurrences of either species can be safely assumed to represent the "American" taxon.

In order of priority, we recommend that editors: 1) always include the Group a and Group b entries, 2) include Group c entries only in areas where the more range-restricted taxon occurs, and 3) generally do not including Group d entries.

For all ISSFs, it is the responsibility of editors to understand (or research) the subspecies groups that are reported and to validate if appropriate. We can provide guidance, so please get in touch with Marshall Iliff (mji26@cornell.edu) with questions.

Our "Non-species recommendations for North America" spreadsheet gives formal recommendations for ISSF (subspecies groups) in the US and Canada.

Hybrids and intergrades

Since any taxon can be added to any eBird checklist at any time using "Add a species," we recommend being conservative with the addition of non-species taxa to filters. Anything that is common enough to be listed on the filter with a non-zero filter limit should certainly be retained. Obviously, these taxa will not generally be flagged for review since most will pass through the filter under the filter limits. For taxa that are rare enough to be listed at zero, it is at the reviewer's discretion whether it is regular enough that displaying the species in the "rare species" list would be helpful. We recommend incorporating such entries when a taxon is recorded multiple times from a region and/or when it could be readily confused in the field with a local rarity (e. g., Snow x Ross's Goose (hybrid), Glossy x White-faced Ibis (hybrid), or Eastern x Spotted Towhee (hybrid)). Isolated single records should not be considered reason to add a hybrid or intergrade to a checklist filter. Our "Non-species recommendations for North America" spreadsheet gives formal recommendations for hybrids and intergrades in the US and Canada.

Spuhs and slashes

We encourage you to be somewhat more liberal in adding spuhs and slashes. Having these on the likely list prompt eBirders to be conservative and gives "permission" to eBirders not to force an identification. Even for rarities, it can be useful to give the slash option so that taxa can be reported conservatively when appropriate. As with hybrids and intergrades, any taxon can be added to any eBird checklist at any point.

Our "Non-species recommendations for North America" spreadsheet gives formal recommendations for spuhs and slashes in the US and Canada.

Domestics

As with spuhs and slashes, we recommend being conservative in providing these taxa on your filters. eBirders can always use "add a species" to add them. See our "Non-species recommendations for North America" spreadsheet for formal recommendations on where and when these should be used.

Domestics are often a part of the avifauna in an area, although often limited to certain areas. We now recommend adding these to filters for any region that has a substantial population of domestics; very rarely do these require validation. Please do try to make users aware of how to use these correctly. Domestic taxa are those with phenotypes consistent with the captive form, not necessarily birds that are considered dependent on humans or recently escaped. Thus, Mallard (Domestic) refers to white, oversized, and otherwise unusual Mallards. Mallard (Domestic) is not meant to be used for wild type birds that are from introduced stock, since it is usually impossible separate released birds from wild birds.

Forms

Forms in eBird fall in two categories: semi-species and sub-specific forms. "Semi-species" are typically species-level taxa that have yet to be described. These are listed with a parenthetical note "undescribed taxon." We encourage adding these to any filter where they occur and are likely to be reported by birders.

Others, like "Brant (Gray-bellied)" and "Red-tailed Hawk (Northern)," are probably valid subspecies and are equivalent to our ISSF groups, but these taxa are not currently recognized on the Clements Checklist. Some such examples (like Slate-colored Coot (White-billed) and Slate-colored Coot (Yellow-billed)) might be morphs or subspecies. The many Red Crossbill call types are also forms.

A final class of forms are taxa for which we have very similar ISSF taxa and where a slash version of those taxa is warranted. Examples are White-crowned Sparrow (Nuttall's) and White-crowned Sparrow (Puget Sound), each of which can be reported as a subspecies group. However, we also have White-crowned Sparrow (Yellow-billed) which refers to these two taxa in combination. We have such taxa for Rock Sandpiper, Crowned Woodnymph, Orange-crowned Warbler, and White-crowned Sparrow).

Our "Non-species recommendations for North America" spreadsheet gives formal recommendations for forms in the US and Canada.

ADDITIONAL DOCUMENTS

These three additional documents are also important and useful for eBird reviewers.

Falsification of documentation and how to detect it

This PDF document is not public. Please contact us directly to receive this document, which can help in cases of suspected fraud. It provides guidance on how to detect fraudulent photos, audio recordings etc. and gives specific examples of where and when this has occurred and how it was detected.

Non-species recommendations for North American eBird checklist filters

This excel document is available for at this link: <u>http://help.ebird.org/customer/portal/articles/1822748-ebird-review-standards</u>. US and Canada reviewers should strive to conform with these guidelines on your filters. Reviewers outside of those countries may refer to it for guidance. We would welcome volunteers willing to compile similar documents for other continents or regions.

Hotspot Management in eBird

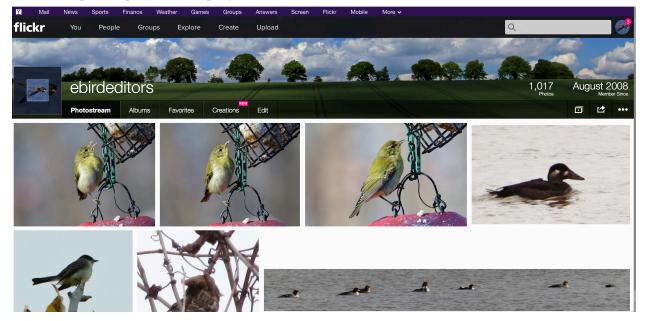
eBird has a separate team managing eBird hotspots; eBird Reviewers are invited to help with this. The hotspot management process is described in this document, which is distributed to all hotspot reviewers. This includes both review and acceptance of new hotspots and management of existing hotspots.

APPENDIX A: Review Tools Photo Archive

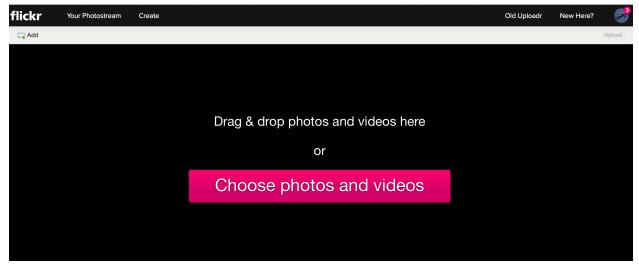
We have created an account in the public photo-sharing site Flickr that allows eBird editors to upload, archive, and share supporting photo documentation for eBird records provided by eBird users during the review process.

1. Log onto Flickr (<u>www.flickr.com</u>) using the eBird Editors account. Get in touch with Marshall, Brian, Chris, or Ian for the username and password.

2. Click the Upload option at the top right of the black bar.



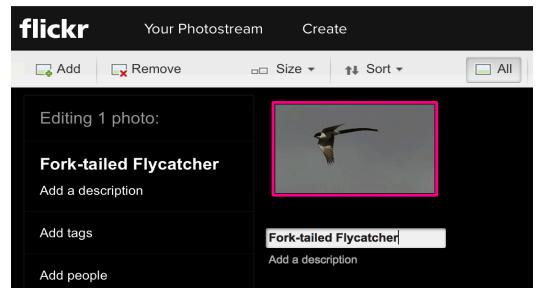
3. Click Choose photos and videos.



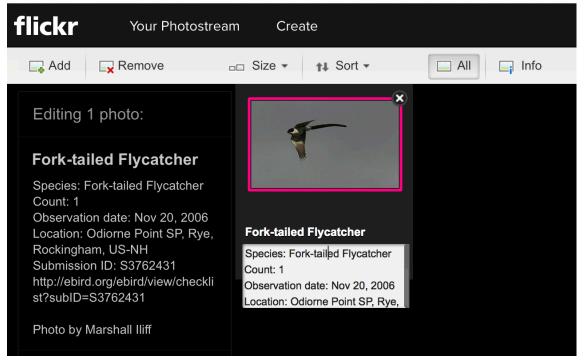
4. Browse to the photo and select the file (see below) or simply drag and drop it into the Flickr window.

Reader () + ere? () Upload
Upload
Upload

5. Once the photo has been loaded, click to add a title to add the species name to the photo.



6. Using the fields in the form below the title, add the relevant eBird record information. In the "Description" field, just copy and paste the record description information from the eBird autogenerated email. This will include the species, count, date, location, and checklist link. Please also add the photographer's name as well.



7. Once this information is saved, the photo will be displayed on the "Photostream" section of the Flickr page. The image is now available for comment and review from the eBird public. eBird editors can easily refind an image by using the Search option on Flickr to search for the Submission ID. This will display all reviewed records associated with a given eBird checklist.