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 inclusion of non-species taxa on eBird filters. Although the examples are generally for the United States and Canada, the philosophy applies globally, and these examples should guide filter standards elsewhere in the world.

For the U.S. and Canada, there is a companion spreadsheet (***Filter taxa recommendations_USA and Canada.xlsx***) that gives formal recommendations for all potential non-species taxa north of Mexico. This spreadsheet categorizes all eBird non-species taxa in the three categories described below in the ISSF (subspecies group) example. In addition to providing recommendations for all non-species taxa (subspecies groups, hybrids, intergrades, spuhs, slashes, domestics, and forms) this document also provides specific recommendations for all introduced species. US and Canada editors should refer to this document and strive to make your filters consistent with these recommendations.

This file is available here: http://help.ebird.org/customer/en/portal/articles/1822748

We divide this list into nine regions from Northwest to Southeast: 1) Alaska; 2) Pacific Northwest (British Columbia, Washington, Oregon); 3) California; 4) Arizona and New Mexico; 5) Interior West (Yukon to Nevada and Saskatchewan to Oklahoma); 6) East (Manitoba to Newfoundland and Oklahoma to Georgia; note that Plains states such as Oklahoma appear in both regions); 7) Texas; 8) Florida; 9) Hawaii.

These are general guidelines that help to provide shortened lists that are regionally more relevant and are available in the master file as well as in regional versions that include only Code A species that occur in the region. These should be considered the formal list of recommendations Contact Marshall Iliff (mji26@cornell.edu) with any questions, corrections, or recommendations.

Non-species taxa fall into seven categories: ISSF (identifiable sub-specific form, also known as subspecies group), hybrids, intergrades, spuhs, slashes, domestics, and forms. This document and the companion spreadsheet provide recommendations on all of these.

Editors always will need to use some judgment on whether to include a category or not; the below rules provide important guidelines. We use "regular" to refer to anything with a limit of 1 or higher on a region's filter for any period. The below rules apply to taxa listed as Code A.

- If only one code A **ISSF** occurs in the region and the species is regular, the ISSF should appear as well as the species category with the same filter limits as its parent species (except in "richmedia" cases; see below). If multiple ISSFs occur, all should be listed with appropriate filter limits, and the sum of those should at least match the parent species. In rare cases where identification is possible only in certain plumages (see Solitary Sandpiper and Short-billed Dowitcher), we recommend maintaining filter periods for the ISSF, even when there is only one expected taxon; these are detailed in the spreadsheet.
- Include code A **slashes** when both species are regular in the region.
- Include code A **spuhs** when two or more component species occur regularly in the region.
- Set the counts for code A **slash** and **spuh** options to match those of the more common taxon and the seasonality to match that of the species with the more restricted seasonality. If both species are vagrants set at 0, it can still be useful to include the slash or spuh (also set at 0).
- In many cases for **slashes** and **spuhs**, we recommend including the slash or spuh even when one of the species is rare. This encourages conservative and careful reporting. For example, Western Sandpiper is rare in much of the Midwest, while Semipalmated Sandpiper is regular. We still recommend including Semipalmated/Western Sandpiper liberally so that observers are appropriately cautious with uncertain identifications of this species pair.

- Include code A **hybrids**, **intergrades**, and **forms** when they are regularly reported (annually or nearly so) in your region. Include them with a count of "0" if documentation is always desired.
- Include code A **domestics** when they occur regularly at at least one site.

Within the US and Canada, our "***Filter taxa recommendations***" spreadsheets give formal recommendations for all non-species taxa below, including ISSF (subspecies groups), hybrids, intergrades, spuhs, slashes, domestics, and forms; each of these is discussed in more depth below. Please get in touch directly with Marshall Iliff (mji26@cornell.edu) with questions. When clarification is needed, he will summarize for the eBird Regional Editors' 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. Note that the nomenclature of ISSFs generally uses capitalized parenthetical names for the more distinctive and well-known taxa and generally uses a lower-case subspecific epithet for those that are more subtle, less well-known, and require more caution when reporting. Detailed information on the subspecies groups in eBird, including the component subspecies and their ranges, can always be downloaded for no charge from the Clements/eBird checklist here: http://www.birds.cornell.edu/clementschecklist/download/. We recommend downloading the eBird/Clements Checklist file, which includes all eBird taxa along with all subspecies (and their ranges) from the Clements Checklist. **Important:** ***Anytime a subspecies group appears on a filter, the parent taxon should be listed as well. This is essential because some users set their checklists to not show subspecies.***

Subspecies on filters fall into three groups:

Group A – Always include. Multiple subspecies groups occur widely and are easily field separable using visual and/or audio ID characteristics; eBirders should be encouraged to report these to refine temporal and spatial distribution for these taxa. Including such entries is particularly important for species that are likely to be split.

Examples: Brant, Willet, Warbling Vireo, White-breasted Nuthatch, Palm Warbler, Fox Sparrow

Extended example: The Boulder County, Colorado, filters should include entries for: "Fox Sparrow" [the parent taxon]; "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 the region.

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 but recommended continent-wide.

Examples: Mallard, Downy Woodpecker, White-breasted Nuthatch

Extended example: Mallard [the parent taxon] and "Mallard (Northern)" should be an option on all Canada/U.S. filters, both set with the same filter limits. While there is no reason for Newfoundland filters to include "Mallard (Mexican)" because that taxon doesn't occur in the region, most southwestern U.S. filters should include four Mallard entries corresponding with all the taxa possible there: "Mallard"; "Mallard (Northern)"; "Mallard (Mexican)"; and "Mallard (Mexican intergrade);" the last required because intergrades (hybrids between the two subspecies groups) are frequent. This treatment is necessary in filter regions where both "Mallard (Northern)" and "Mallard (Mexican)" occur, because a checklist with entries for "Mallard" and "Mallard (Mexican)," but with no entry for "Mallard (Northern)" would not allow researchers to determine which records of "Mallard" are referable to which subspecies, or whether those birds were simply not identified to subspecies. For consistency, we thus recommend

Mallard (Northern) be used across the continent. [See also Mallard (Domestic type) for correct usage of that category.]

Finally, we also include some subspecies groups that are split as species by other authorities, specifically the IOC (http://www.worldbirdnames.org/). Since eBird does provide IOC nomenclature as a user selection, having these IOC species listed at the subspecies level allows users to accurately report their birds when their common name preference is set to "English (IOC)". These examples always have a note in the excel sheet indicating that the IOC taxonomy is an important reason for inclusion.

Examples: Sharp-shinned Hawk, Great Horned Owl

Extended example: Sharp-shinned Hawk is split into four species by the IOC and Great Horned Owl is split into two species. There is no eBird taxon that matches the IOC species "Sharp-shinned Hawk." Instead, eBird subspecies groups Sharp-shinned Hawk (Northern) and Sharp-shinned Hawk (Caribbean) comprise the IOC species "Sharp-shinned Hawk". Additional Middle American and South American taxa Sharp-shinned Hawk (White-breasted), Sharp-shinned Hawk (Plain-breasted), and Sharp-shinned Hawk (Rufous-thighed) match the IOC species White-breasted Hawk, Plain-breasted Hawk, and Rufous-thighed Hawk, respectively. For Great Horned Owl, all North American birds represent the eBird subspecies group Great Horned Owl (Great Horned) which matches the IOC species "Great Horned Owl", while South American birds are split as Lesser Horned Owl by the IOC and match the eBird subspecies group "Great Horned Owl (Magellanic)." Matching taxonomy to the IOC can be complicated, but by including these taxa, eBirders will learn more about variation in these species, reduce confusion for those that use IOC taxonomy, and track the occurrence of these distinctive subspecies groups more accurately.

Group A – richmedia. Within group A, we have a subset of taxa encoded as "richmedia" which are very hard-to-identify taxa that are still poorly known. A well-known example is Red Crossbill, which has several groups or Types that have very similar calls and of which distributions and movements are still being worked out. Please do include these on your filters as recommended, but please set them to 0 and require rich media to validate the records.

Group B – Reviewer discretion. In general, we do not recommend using these subspecies groups. However, they may have local relevance so taxa in this group may 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 their use in a region.

Examples: Eastern Towhee, Horned Lark

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 compelling reason for such treatment in Ontario, where only the red-eyed subspecies group occurs. However, filter regions that include "Eastern Towhee (White-eyed)" should certainly also include "Eastern Towhee (Red-eyed)" (see Extended example in Group A, above, for similar treatment). Horned Lark is included here as well, since vagrants from Asia in western Alaska are easily distinguished from the local subspecies, but including Horned Lark taxa continent-wide would be problematic given subtle and overlapping characteristics in the groups.

Group C – 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, and thus in the case of a future split, these records are easily assignable to either taxon based solely on range. It is not important to include these on the filter unless another form also occurs regularly. These subspecies are usually used in cases of extreme vagrants, and are necessary for that purpose. Both of the below taxa have occurred in Europe, and reports are interesting to track.

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 safely can be

assumed to represent the "American" taxon. Users that do report the expected taxon should have their records validated (using the "Species—Not exceptional" rationale). There are other additional subspecies groups that are very difficult to identify (e.g., Willow Flycatcher subspecies groups) or poorly known by birders (e.g., Common Yellowthroat subspecies groups); these are also classified as group C for now. Putting these on eBird checklist filters would result in misuse and would unnecessarily inflate the length and complexity of the data entry for the checklist.

In order of priority, we recommend that editors: 1) always include Code A taxa; 2) include Code B taxa sparingly and primarily in areas where the more range-restricted taxon occurs; and 3) avoid including Group C 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.

Hybrids and intergrades

Since any taxon can be added to any eBird checklist using "Add a species," we recommend being conservative with the addition of hybrid and intergrade taxa to filters. Anything that is common enough in a region to be validated without documentation should certainly be listed on the filter (e.g., American Black Duck x Mallard (hybrid) in most of the East). 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)]. Including the hybrid alongside the rarity will hopefully encourage observers to be careful when reporting either taxon. Isolated single records should not necessarily require adding a hybrid or intergrade to a checklist filter. Note also that many hybrids are difficult enough to identify that they should always be listed as zero on the filter. A number of hybrids in group B are listed as a rarity and these should almost always require rich media for validation.

Spuhs and slashes

Having spuhs and slashes on the likely list prompts eBirders to be conservative and encourages them not to force an identification. In general, for the slashes and spuhs included in Category A, we recommend including the option if both species (for a slash) or two or more species (for a spuh) are listed on your filter with a count of 1 or higher. Even for rarities, it can be useful to give the slash option so that taxa can be reported conservatively when appropriate. For example, Short-billed Dowitcher and Long-billed Dowitcher both occur widely in the US and Canada, but differ regionally in abundance and seasonality. Since distant and silent birds are extremely challenging to identify, and even well-seen birds can be frustratingly difficult, we recommend providing Short-billed/Long-billed Dowitcher anywhere that both species might occur. As with hybrids and intergrades, any taxon can be added to any eBird checklist at any point.

We encourage editors to be liberal in adding spuhs and slashes, but also to be conservative in the number of options to represent a given field problem. For jaegers, instead of the various species-pair options that users can select, we recommend including jaeger sp. on all filters that have more than one species, rather than the more specific slash options. Similarly, Neotropic/Double-crested Cormorant and Great/Double-crested Cormorant both have unique field challenges and also have regions of the country where these are the primary cormorant identification challenge. But identification of distant, similar, or poorly-seen cormorants is a worldwide issue best represented by universal availability of cormorant sp. Users always have the option to add the more specific option if they understand its use and want to add it. (These records should be validated when used appropriately.) This general philosophy is followed in the companion spreadsheet and we urge consistent application of these recommendations across eBird.

Most Code B slashes are ones that have narrow contact zones or are rarely an identification issue.

Domestics

Domestics are a part of the regularly occurring avifauna across much of the world, although most are limited to populated areas. We recommend adding these to filters for any region that has a substantial population of domestics; very rarely do these require review. Please do try to make users aware of how to use these correctly. Domestic taxa are those with phenotypes consistent with the domesticated form, not necessarily birds that are dependent on humans or recently escaped. Thus, Mallard (Domestic type) refers to white, oversized, and/or otherwise unusual Mallards. Mallard (Domestic type) is not intended for wild type birds that are from introduced stock, since it is usually impossible to differentiate released birds from wild birds. **Note:** Since Graylag Goose and Swan Goose interbreed widely in captivity, since few birders understand this, and since trying to parse their ancestry based on appearance is almost futile, we recommend "domestic goose sp." in lieu of Graylag Goose (Domestic type) or Swan Goose (Domestic type).

Please be sure to understand eBird policy on Rock Pigeon (http://ebird.org/content/ebird/news/rock-pigeon/) and Muscovy Duck (http://help.ebird.org/customer/portal/articles/2259953).

Forms

Forms in eBird might pertain to two other categories in the future since they include both undescribed species and sub-specific forms that are not yet widely accepted.

Undescribed taxa are typically species-level taxa that have yet to be described (e.g., San Pedro Tanager, Santa Marta Screech-Owl) and are listed with a parenthetical note "undescribed form." Sometimes this category includes taxa that have been formally described, but are not yet accepted as valid. We encourage adding these to any filter where they occur and are likely to be reported.

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 is for taxa for which we have very similar ISSF taxa and where a slash version of those taxa is warranted. White-crowned Sparrow (*nuttalli*) and White-crowned Sparrow (*pugetensis*) are two examples. 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, and we recommend using these instead of the more specific subspecies options.

Codes used in Filter taxa recommendations spreadsheets

The latest version of this file and the regional versions are always available here: http://help.ebird.org/customer/en/portal/articles/1822748

Note that this file provides not only recommendations for using non-species taxa on your filters in your regions, but also official policies for the US/Canada on Introduced species. In addition to comments discussing the validation of Exotic species, we also provide a columns for Exotic validation region that clarifies the state(s) or regions where the species should be added to filters (if regular enough) and validated (if well-documented). See more on Introduced species policies in our "Review Tool and Filter" document, also available at the above link.

The taxa are color-coded as follows: Exotic species (blue); recommended non-species taxa (green); and not recommended taxa (red).

The abridged file provides Common Name, Code, Comments, Exotic validation region, and the nine regional codes above.

The unabridged (.xlsx) files provides the following Groups that may assist in sorting: Non-species (non-species taxon); Established Exotic (species accepted as established by the American Birding Association); Exotic (exotic species to be tracked in eBird); Exotic/Native (species with exotic and native populations in US/Canada); Exotic/Vagrant (species known as both Exotic species and a vagrant in US and Canada); Reintroduced/Native (Native species for which some populations are reintroduced).

CODE

Code A = Always include. Include on filters wherever this form occurs for subspecies groups and wherever it is a regular field problem for other taxa.

Code A - richmedia = Always include. However, these taxa are an identification frontier and collecting documentation is essential. Filters should be set at zero. Rich media (photos, audio recordings, or video) should be required for acceptance.

Code A - vagrant = Always include. These taxa are vagrants to the US/Canada and these options will be rare.

Code B = Rarely include. These taxa may be of use regionally, but generally should not be used commonly on filters. Before adding these to your filters, please review other options.

Code B - rarity = Rarely include. These taxa are very rare (most are hybrids) and should be used only with caution. All or nearly all should be set at zero and should require rich media if included on filters.

Code C = Never. We do not recommend including these on your filters; observers can add as needed.

Code C - extralimital = Never. These are not needed in the US/Canada because they do not occur in the US/Canada, but are included here because other subspecies occur within the US/Canada and are listed elsewhere in this document.

REGIONS

See third paragraph above for regional definitions. Sorting by the below column will give a prioritized list of regular species, vagrants, and taxa generally not in your region.

1 = regular in region and should be considered on all filters in the region.

vag = Vagrant in region. Should be considered where the species occurs as a vagrant.

x = Unknown or not regular in the region.

Regional non-species taxa files

For editors that prefer shorter lists more relevant to their local area, we also provide a region-by-region list of the taxa listed as code A and known from the region. The latest version of these files are always available as PDFs here: http://help.ebird.org/customer/en/portal/articles/1822748

- Alaska
- California
- Coastal NW
- Arizona/New Mexico
- Texas
- Florida
- East
- Interior West
- Hawaii