# UWIN Observer Photo Tagging Guidelines

Updated July 2019

LOGIN

The UWIN database uses Google Cloud to store our huge number of camera trap images collected across study areas. This means that you must have a Google account to log into the site. Before you can log in, you must be added by a user with access. Once added, you can login to the database by clicking 'Login' in the upper right corner of the landing page.

When the login button is clicked, follow the instructions to login using your google account. Once logged in, you should see a navigation bar on the left hand side and your google icon in the upper right corner.
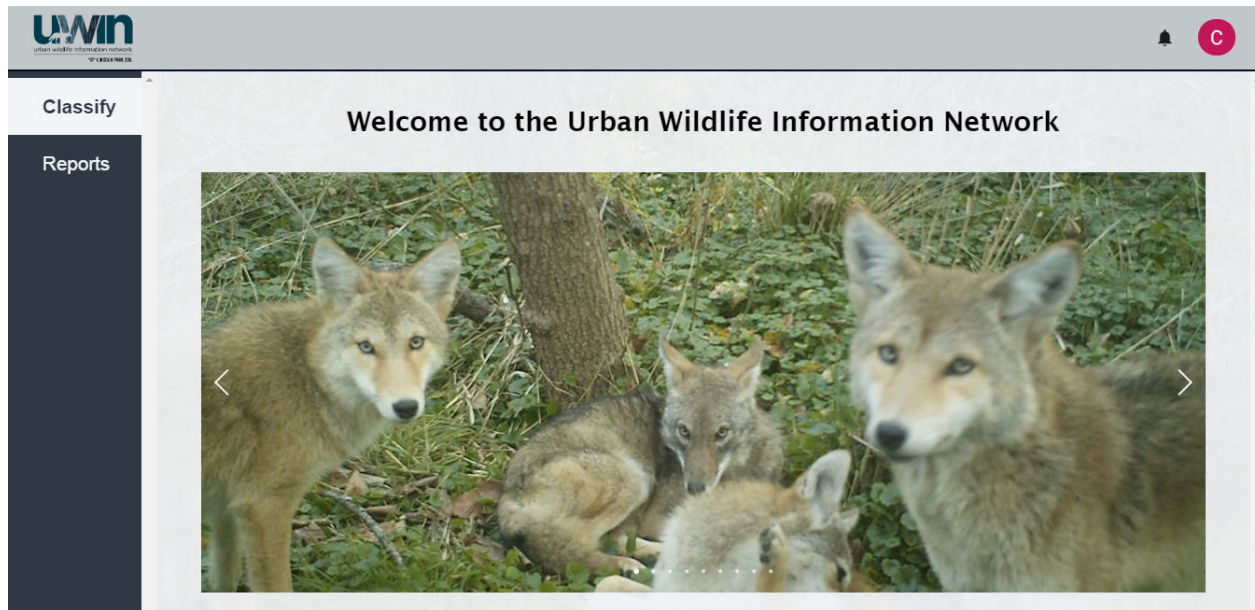
CLASSIFICATION

The "Classification" page displays all photo groups that have been assigned to the current user for classification. You can navigate to this page by selecting the "Classify" tab on the navigation bar on the left hand side of the screen. The landing page will display a table of any photo groups that have currently been assigned to you for classification, along with a button to begin tagging those photos (Figure 1).
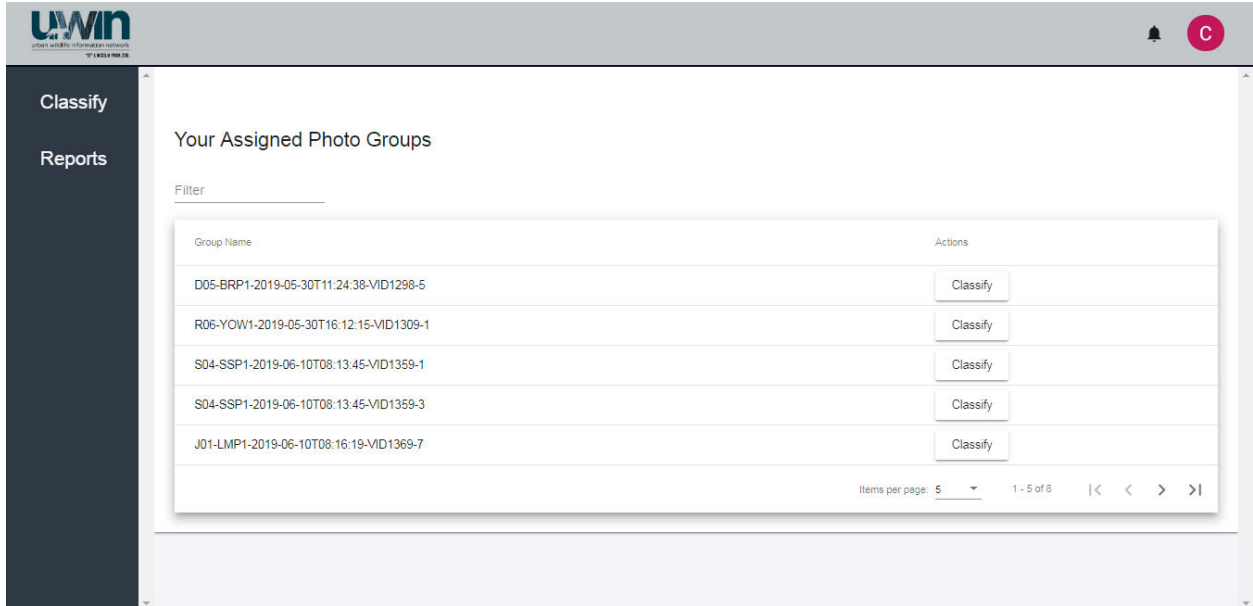
Figure 1. Classify landing page

TAGGING

The "Tagging" page allows you to classify each photo in an assigned photo group with the species captured in the image. You can navigate to this page by clicking the "Classify" button for a specific photo group on the Classify landing page. The page will display dropdowns to select species, the number of individuals, and any details applicable to the photo. The combination of these dropdowns together represents a detection (Figure 2). The species dropdown lists the common name of all species. With both the species and the number of individuals, you can type directly in the input bar to help filter your search. In line with the dropdowns are buttons to remove a detection; however, every photo must have at least one detection. **This online database is used to store data from all UWIN partners. When tagging photos, be sure to only use tags for species found in your study area (see Animal Identification Guide).** If you are having trouble with a species ID, don't hesitate to ask a staff member for help.

Clicking on the "Zoom Photo" button will zoom in on the current photo. You can then view the next or previous photo, which allows you to toggle between photos in sequence to compare the current photo to the photos just before and just after it was taken. This method can help you spot animals you might not have seen by looking at a single picture or help you identify an animal that you could not recognize in the single photo. However, do be careful, and check the time stamp in the lower right corner of the photo. If there is considerable time in between photos, it cannot necessarily be assumed that the animals in consecutive photos are the same.

TIP: to more easily toggle between photos in the "Zoom Photo" window, zoom out (Ctrl + scroll down) so that the photo is completely visible in the screen. To see more detail in a single photo, zoom in farther (Ctrl + scroll up)—if you need to zoom in closer than the database allows, you can open the image in a new tab (Right click + open imagine in a new tab) and then zoom (ctrl + scroll up/down)

Clicking on the "Add Another Detection" button will add another set of dropdowns if there are multiple species in the photo. Clicking the "Save & Next" button will save the current tags and display the next photo in the photo group along with a blank set of dropdowns to start a new detection. Clicking the "Previous" button will display the previous photo along with all tags that have been saved with that photo. You can edit these tags by simply selecting different dropdown values, removing a specific detection, or adding another detection. **If you need to go back and edit previous photo tags, be sure to click on "Save & Next" for each photo, otherwise the changes will not be saved.**

The "Use Previous Photo's Tags" button will be disabled on the first photo; clicking it at any other time will automatically pre-fill the current dropdowns with the same values from the previous photo. (Note: if you use the "Use Previous Photo's Tags" button and then go back to change a previous photo, all subsequent photos that have used the edited photos tags will also be changed).

Below the current photo is a textbox to leave an optional comment on the photo, as well as a checkbox to highlight the photo if you find the photo particularly interesting. To save on storage space and costs, tagged photos are retired to a long-term storage bin in Google Cloud. **The highlight function allows photos to be easily recalled after tagging, so please use this option anytime a photo is of interest!**
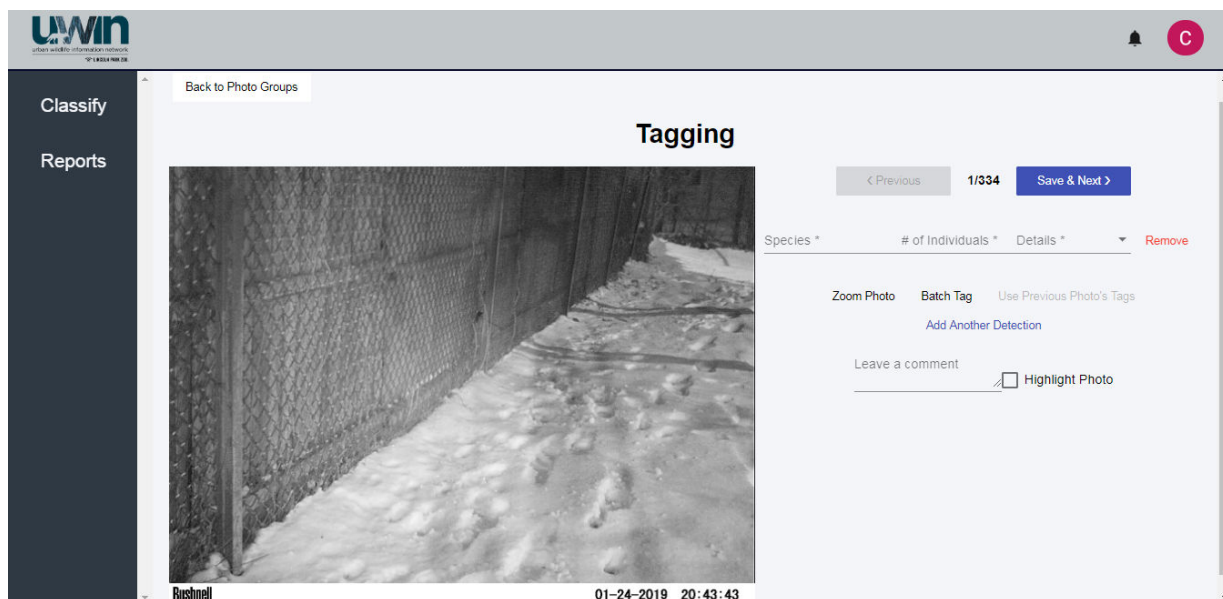
Figure 2. Tagging page

Once you have tagged all photos in the photo group, a dialog will open asking you to confirm that you would like to submit all your detections (Figure 3). Clicking "Yes" will return you to the Classify landing page (Figure 1), and the photo group you have just completed will be removed from your list of assigned photo groups. (Note: If you need to end a tagging session before submitting all detections, you can select "Back to Photo Groups" to return to the Classify landing page. When you are ready to finish tagging, click on the "Classify" button next to the photo group you started and you can pick up where you left off.)

Are you sure you want to submit your detections for this photo group?

No   Yes

Figure 3. Completion dialog

GUIDELINES FOR TAGGING PHOTOS

1. Enter all species that you see in the photo
2. Count the number of individuals to your best ability. The maximum number of individuals that we use in analyses is **6,** so if there are more than **6** individuals of a single species present, just enter **6** for that species.
3. If it is absolutely impossible to distinguish between a gray squirrel or a fox squirrel, enter the species as "**squirrel**". Do your best to determine which species of squirrel you see, and feel free to consult with someone in the UWI office for a second opinion (the more specific we can be, the better).
4. Vehicles should be ignored except for lawn mowers. Enter the species as **"lawn mower"**. If there is a human in the frame running the lawn mower, be sure to tag the human separate from the lawn mower.
5. If there is a human-triggered disturbance, such as a soccer ball kicked into frame, but there is no actual human present in the frame, enter the species as **"empty"**.
6. If a non-human disturbance such as branches moving in the wind triggers the camera, enter the species as **"empty"**.
7. Enter avian species as **"bird"**. If you know the species, enter it in the comments section. Feel free to ask if you don't know the species. (Note: some UWIN partners tag specific avian species, so you may see a variety of birds in the drop down species list.)
8. If a photo is hazy or of such poor quality that you can't see if something is in the photo, enter as **"empty"**. Explain in the comments.
9. If there are young in the photo, select **"young present"** from the "Details" drop down list.
10. If there is a dog off leash, select **"off leash"** from the "Details" drop down list.

11. Some UWIN partners have included other options under "Details". For the Chicago data, the only details we add to photo IDS are "young present", and "off leash" (for domestic dogs). Please ignore additional detail options.
12. If you see a really cool photo or a rare species, click the "Highlight" box. We can use these in presentations/blogs/social media, etc.!
13. Please do not add any species to the species list without consulting UWI staff.

BATCH TAGGING

The batch tagging option allows you to tag multiple photos with the same species in them all at once (e.g. all photos are empty or all photos have 1 coyote). You can navigate to this page by clicking the "Batch Tag" button on the Tagging page. This page will display 3 photos at a time, starting with the last photo you viewed on the Tagging page (Figure 4). The next 3 photos in the group will be displayed each time you click "Load More Photos" until all the remaining photos in the group are displayed on the page. You can select or deselect photos by clicking on the photo; a selected photo will have a purple border around it. The "Select a range of photos" button allows you to quickly select a large portion of photos to tag; once the button is clicked, you will be prompted to select the first photo and the last photo. All photos in between will automatically be selected.
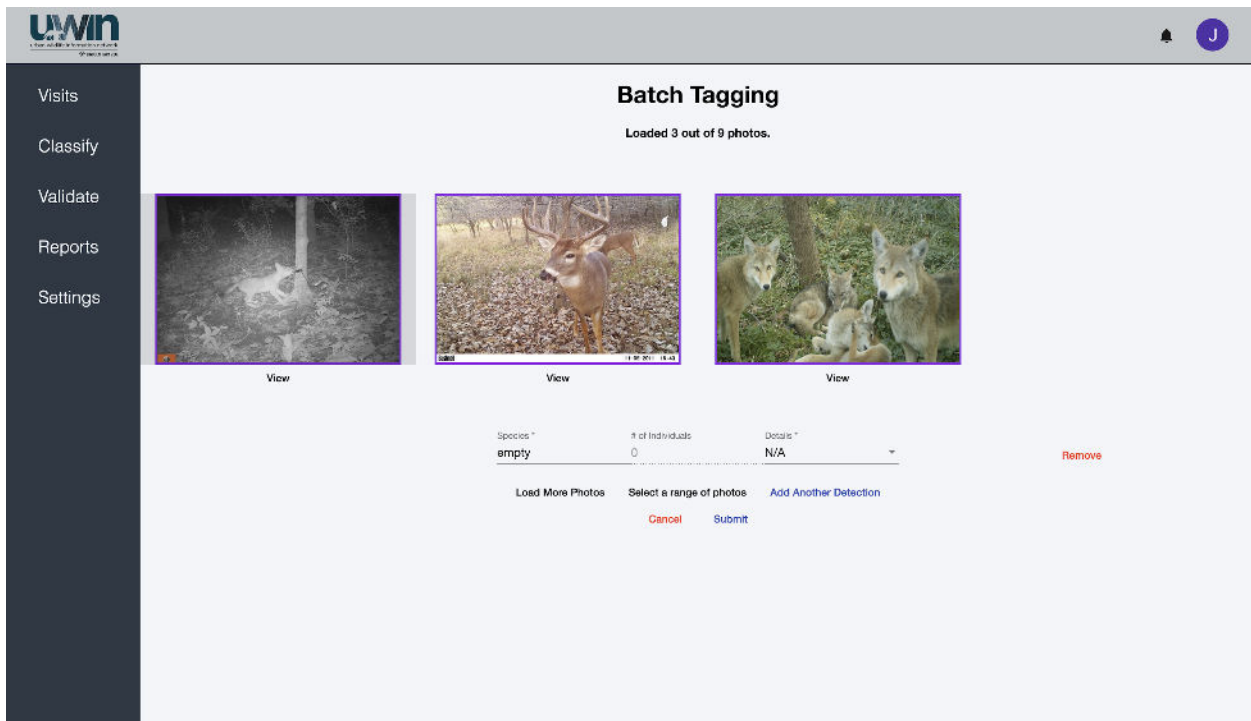

Figure 4. Batch tagging page

Beneath each photo is a "View" button; when clicked, a dialog will open displaying a larger version of the photo, allowing you to examine it more thoroughly (Figure 5). The dialog also has

Next and Previous buttons to navigate through the photos, as well as a button to select or deselect the current photo.
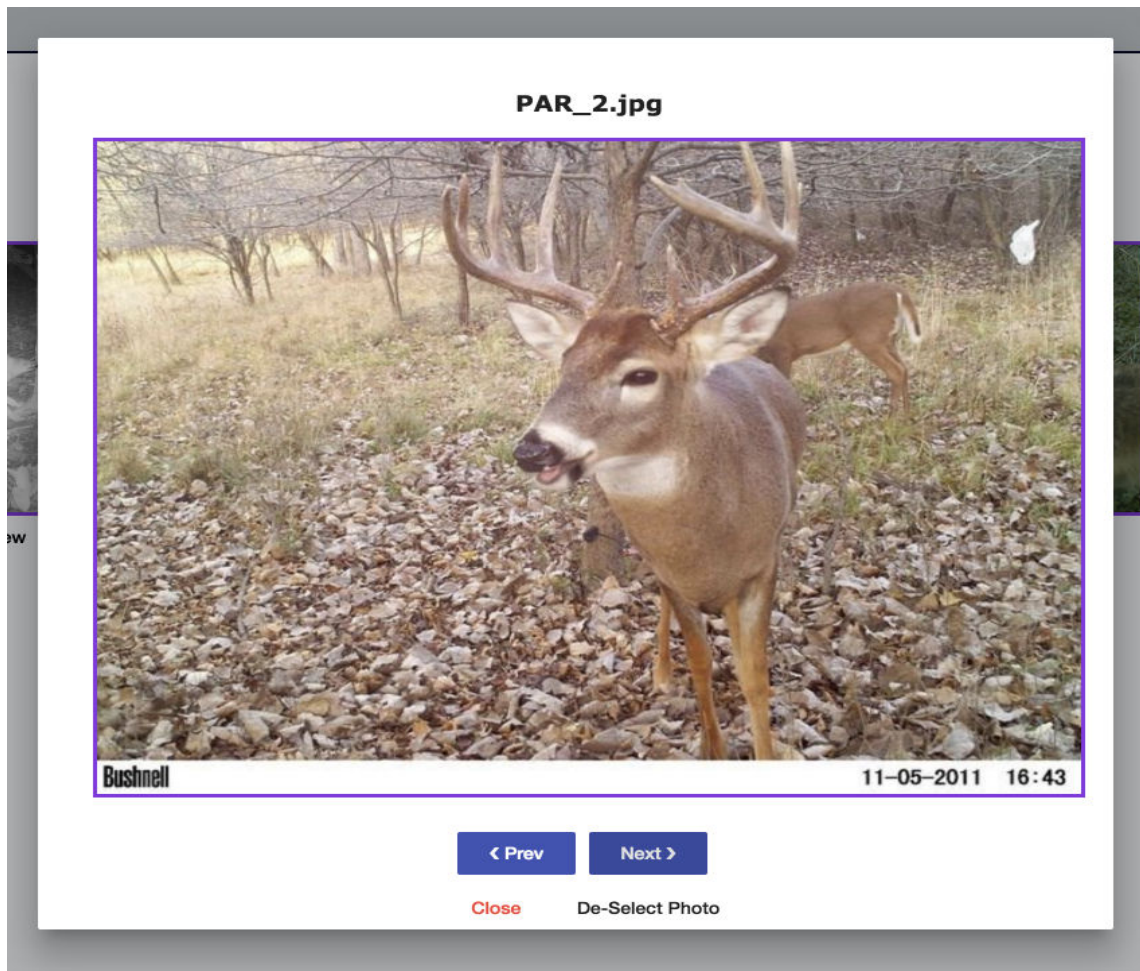

Figure 5. Dialog to view a photo more closely

Once the tags are submitted for all selected photos, you will return to the Tagging page on the first photo in the group that does not yet have tags. After batch tagging, if all photos have been tagged, a dialog will ask you if the photo group is finished (Figure 3 above).

The data from your photo tagging contributes directly to UWIN's scientific research. Using the camera data, we can look at the effects of urbanization on population dynamics, biodiversity, wildlife behavior, and more to help improve the relationship between humans and wildlife in an increasingly urbanized world.

As a citizen scientist, your efforts are essential to making this wildlife research possible!

Thank you for your help!