

IUPUI Bird Window Strike Survey

Instructions

Project Contacts:

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Route Items (what you will need to bring when you walk your route):

Bird Collection Kit (provided by CEES):

- plastic baggies (for collecting dead birds)
- specimen information card (to include with dead birds that you collect)
- nitrile gloves
- safety glasses
- ruler

Route Map (with building codes and compass directions marked out for you)

Clipboard; pick up a clipboard from IO-124 before walking your route and return the clipboard when you are done.

Things you need to provide:

- surgical mask (these are available from dispensers throughout campus)
- pen/pencil (to record information on the data card if a bird is found)
- **smartphone** (or tablet) so that you can:
 - photograph birds (you can use a 35mm DSLR camera if you prefer)
 - contact organizers (if necessary)
 - record data to the online form: you can either input the data digitally on your route using a phone, tablet, or laptop - or - enter it following completion of your route.
When a dead bird is collected, the data needs to go both into the online form and be recorded on the card that is placed in the bag with the bird.
- white paper (bring several pieces)

You may also wish to have:

- headlamp or flashlight if it is difficult to see during your route time

A map of your route with the building(s) to survey will be sent to you prior to the survey start date. The building(s) on your route will have compass directions marked (so that you know which side is facing north, south, etc.). Buildings will be sectioned into quarters so that we can have finer resolution as to where on the buildings strikes are occurring. If you don't understand any part of the route or are not familiar with the area, please let us know! We can help you with this.

To walk your route:

Walk around the building, carefully scanning the ground as you walk, looking for dead or injured birds. You need to examine the ground around the building from the base of the wall to a distance of approximately 4 m (about 12 ft) from the wall. Walk slowly enough that you are able to make good observations. If there are bushes or trees at the base of the building, make sure to look around and under them if you can. Be very careful when examining flowerbeds: do not damage the flowers!

For a two-person team, one person can concentrate on the area closer to the building (0-2 m; 0-6 ft), and the other person can concentrate on the area further from the wall (2-4 m; 6-12 ft). If you are walking a route by yourself, you may want to walk around a building twice: once to inspect the area closer to the wall, and once to inspect the area further from the wall.

Library route. The library presents a special challenge because it has an overhang (and numerous flowerbeds). You will need to inspect from the wall to the edge of the overhang, and from the overhang an additional 4 m (12 ft), since it is possible that birds could strike the undercut portion of the wall or the overhanging portion. Note: birds are probably much more likely to strike the windows of the upper stories (i.e. overhanging section).

Data to report:

Record the following data to the [online bird strike data form](#) each time you walk your route:

- Team or Collector Name(s)
- Date
- Time
- Shift (AM or PM)
- Route name
- Did you find any birds (yes/no)

If you find a bird:

Record the following data to the [online bird strike data form](#):

- name of the building by which the bird was found
- the building face direction at which the bird was found (north, south, etc.)
- the building section where the bird was found (consult your map)
- species identification (made by Merlin) - **do Merlin identification 1st !!!!**
- species identification (made by Seek) - **do Seek identification 2nd**
- was the bird alive or dead
- if dead, was the bird collected (yes/no)
 - if no, add a note explaining why it was not collected
- if the bird was alive, describe its condition (see below for the *Live Bird Protocol*)
- add any notes you feel to be relevant

Collection Protocol for Dead Birds:

Step 1: Fill out a specimen information card.

- this will be used when photographing the bird and will go in the 2nd ziplock bag.
- identify the bird using Merlin first THEN identify the bird using Seek

When handling birds, wear 2 pair of nitrile gloves, a surgical mask, and eye protection.

Step 2: photograph the bird (see below)

Step 3: Collect the bird. We will collect all birds. Even if a bird is in poor condition (decomposing, etc.), collect it. If you are uncomfortable collecting a bird that is in poor condition, text Dr. Schmalhofer (317-601-4445), identify yourself as being part of the Bird Window Strike Project, and let her know the location of the bird in poor condition: someone from CEES will come collect the bird.

Bird Collection Procedure (smaller birds):

- turn the foldable-but-non-sealable sandwich bag inside-out
- gently pick up the bird - note that your gloves are not actually touching the bird
- if the bird is in poor condition (decomposed, etc.) pick up as much as you can (pieces, bones, loose feathers)
- turn the foldable sandwich bag right-side-in, enfolding the bird (or bird pieces)
- with the bird at the bottom of the bag, gently roll up the bag to wrap up the bird
- place the bird-in-the-bag inside the ziplock sandwich bag (the lighter weight ziplock bag), remove as much air as possible, and zip seal the bag
- place the bird-in-the-ziplock bag and the specimen information card in the ziplock freezer bag (the heavier weight ziplock bag), and zip seal the bag
- after finishing your route, **deposit the bagged bird in the BWSP Collection Bin**, located outside the door of the CEES lab in Innovation Hall (IO-124)
- **Text Dr. Schmalhofer to alert her that a bird is in the bin awaiting pick up.**
Collected birds will be transferred to a freezer.

TROUBLESHOOTING: collecting BIG birds.

Most birds that you find will be small songbirds. These small birds should fit in the sandwich bags. However, you may find larger birds (a Blue Jay, for example) that will not fit in the small bags. Your bird collecting kit includes a gallon-sized freezer bag to use for larger birds.

Collection Procedure for BIG birds:

- place the specimen information card in a ziplock sandwich bag and seal it
- gently pick up the bird and place it in the gallon ziplock bag
- place the ziplock sandwich bag (with the specimen card) in the gallon ziplock bag with the dead bird; remove as much air as possible, and zip seal the bag
- after finishing your route, **deposit the bagged bird in the bird collection box inside the BWSP Bin**, located outside the door of the CEES lab in Innovation Hall (IO-124)

TROUBLESHOOTING: collecting VERY BIG birds.

This is not likely to happen, but it's not out of the realm of possibility: you may find an exceptionally large bird, such as a hawk. If a bird is too large to fit in a gallon-sized ziplock freezer bag, contact Victoria Schmalhofer (317-601-4445) or Adrienne Kelley (317-435-2038) for instructions. Prepare a specimen information card and proceed with normal photography.

If you find a live bird:

Bird-building collisions are not always fatal. Birds are sometimes only stunned and will recover on their own. If you encounter a live-but-stunned/injured bird during your survey, **the *Live Bird Protocol*** is initiated.

If the bird does not immediately fly away (or attempt to fly away) as you approach, **text Adrienne Kelley (317-435-2038) or Victoria Schmalhofer (317-601-4445) before proceeding.** One of us may be able to come out and assess the situation and take care of the bird. If we are unable to, we will direct you for the next steps. Typically what will happen is as follows:

- gather what data you can without stressing the bird
- photograph the bird (if you can) - but do not handle the bird!
 - this will likely be from a distance; use your smartphone's zoom feature to try and get closer (without actually coming closer)
 - even if you can't photograph the bird, you may still be able to identify it; use Merlin's non-photography bird ID feature to try and identify the bird
- finish walking your route, and then return to where you saw the stunned/injured bird
- evaluate the bird's condition, and record this information to the [online bird strike data form](#):
 - your evaluation will be based on whether the bird is still present, and, if it is, how is it behaving (sitting upright, lying down; alert, dazed, non-responsive-but-breathing; calm or showing signs of stress) and any obvious signs of injury (blood, broken wing, etc.)
- note anything you feel of significance

What happens if the bird is seriously injured:

We have accredited wildlife rehabilitation people on call to come collect seriously injured birds. If you find a bird that is deemed to be in need of rehab assistance, you may be directed to go to IO-124 and get a **stunned bird box** (kept in the same area as the BWSP Collection Bin and clipboards). A *stunned bird box* is a small cardboard box that is set over the stunned bird, so that the bird is in a small, dark space (free of distressing sights). Birds find dark enclosed spaces calming. (This is why falconers put hoods on their falcons.) The box will also help the wildlife rehab person locate the bird if someone cannot stay with the bird until the rehabber arrives.

If you find an injured bird in need of assistance, contact:

Providence Wildlife Rehabilitators
317-902-3825

They prefer that you text them if you find injured wildlife.

Photographing DEAD birds: DO THIS BEFORE COLLECTING DEAD BIRDS

Take 3 photos of the DEAD bird: a side view, a ventral view, and an *in situ* photo.

When handling birds, make sure you are wearing 2 pair of nitrile gloves, a surgical mask, and eye protection.

In situ photograph:

- photograph the bird exactly as you found it
- if possible, remove any vegetation that is obstructing your photo

Side and Ventral views – positioning the bird for the photographs:

- use the clipboard with a piece of white paper on it as your backdrop
- lay the bird flat on the clipboard/paper
- place the ruler to the right of the bird, with the inches side oriented top-to-bottom (using the ruler for scale provides a means of determining the size of the bird)
- place the specimen ID card (which has been filled out) in the lower left corner of the photo

- **Side View Photo:** photograph the bird's **right side**:
 - position bird with its left wing on the ground, ruler (oriented top-to-bottom) to the right of bird, (bird is facing the ruler), ID card in lower left corner of photo
- **Ventral View Photo:** photograph the **belly** of the bird
 - position bird with its back on the ground, ruler (oriented top-to-bottom) to the right of bird, ID card in lower left corner of photo

Please be sure your bird is in focus!

Send the photos by email to cees@iupui.edu

- **in the subject line**, indicate **route/day/shift and date** the photograph was taken
- **rename the photos before sending them as jpg files** use the following naming convention:
[YourLastName_route_day_shift_building-aspect_date_view.jpg](#)
 - use the name of the person who took the photo
 - aspect is the side of the building where the bird was found (use abbreviations)
 - date is in DayMonthYear format (e.g. 2Feb2023)
 - view refers to *side* or *ventral*

So, for example, if Phelan Smith, who surveys the SL/LD route on Monday evenings, took photos of a dead bird that was found along the north wall of SL on April 15, the file names would be:

[Smith_SL-LD_Monday_PM_SL-N_15Apr2023_insitu.jpg](#)

[Smith_SL-LD_Monday_PM_SL-N_15Apr2023_side.jpg](#)

[Smith_SL-LD_Monday_PM_SL-N_15Apr2023_ventral.jpg](#)

If the team finds more than one bird on the same side of a building, assign numbers to the birds and include the number after the view designation. For example, the team finds a total of three birds along the north wall of SL on that date, file names for bird #3 would be:

[Smith_SL-LD_Monday_PM_SL-N_15Apr2023_side-3.jpg](#)

[Smith_SL-LD_Monday_PM_SL-N_15Apr2023_ventral-3.jpg](#)

Photographing LIVE birds:

Take photographs of LIVE birds as best you can.

Do not be concerned about getting a side view and a ventral view: take whatever photographs you can without handling the bird. Handling the bird will stress it, and that is something we want to avoid. Any photographs you can get should still help us identify the bird.

The naming convention for a live bird photograph is:

[YourLastName_route_day_shift_building-aspect_date_live.jpg](#)

Photographing decomposing birds:

You may find a bird that has been on the ground for some time, so it is decomposing.

Photograph decomposing birds exactly as you found them. This is referred to as an *in situ* photograph.

Try to remove as much vegetation as possible (if it is obstructing your photo). An *in situ* photograph is one of the three photos that you normally take of all dead birds.

The naming convention for an *in situ* bird photograph is:

[YourLastName_route_day_shift_building-aspect_date_insitu.jpg](#)

NEXT, *if the bird is in reasonably good shape*, carefully lift the bird (using an inside-out baggie) and place it on a piece of paper on the clipboard (with a plastic bag beneath the paper, to protect the clipboard).

Take side view and ventral view photos. Use the standard naming convention for these photos.

If the bird is falling apart as you try to pick it up, do not try to photograph the ventral and side views.

Collect all the pieces, bones, and feathers you can and proceed with bagging/collecting the bird.

If you find no birds:

That's ok. You won't find a bird every time at least, we hope you won't. Submit the online bird strike data form each time you walk your route (whether you find a bird or not - "no birds" is still data).

At the end of the route:

Bring any birds collected to the BWSP Collection Bin in Innovation Hall (IO-124).

Return your clipboard to the clipboard bin (same location); throw away any paper that has been used for bird photography.

Throw away your nitrile gloves if you handled a bird, and **wash your hands thoroughly.**

What to do if you need supplies:

Where you go to restock supplies will depend on what you need.

Earth Sciences Office (SL-118) student worker's desk (the desk is located directly in front of you as you enter the office). The Earth Sciences office assistants will have supplies stashed in/near their desk. These will generally be the types of things that, once used, cannot be re-used (i.e. consumable supplies).

IO-124 Bird Window Strike Project bin. The BWSP bin in the doorway alcove of IO-124 will contain several things in addition to the **bagged bird box** (a small plastic sealable box in which you will place dead bagged birds). The items in the BWSP bin will generally be items that stay in the main bin (such as the dead bird collection box) or items that you borrow while walking your route and then return once you have finished. [Your initial bird kit can be picked up from the bin \(or a box on top of the bin\).](#)

Here is where you will find various items:

- nitrile gloves (SL-118)
- bird collecting bags, regular size (SL-118)
- specimen collection ID cards (SL-118) - *you will also have a pdf file to print your own*
- bird collecting bags, extra large size, (IO-124)
- stunned bird box (IO-124)
- clipboards (IO-124)
- ruler (IO-124)
- marker flag (IO-124)

A few marker flags will be placed in the BWSP bin (IO-124). A flag may be needed if you find a stunned bird. Place the flag in the general vicinity of the stunned bird (but not too close to the bird - do not stress the bird). This will allow you to easily find the location of the stunned bird when you finish your route.

You may also use a flag to mark the location of a decomposing bird (if you feel uncomfortable collecting it yourself). The marker flag will let CEES staff know where to look for the bird's remains.