

Bird-window Collisions Project Duke University
Protocol for Carcass Surveys (modified from Hager and Cosentino)
Spring and Fall 2014



1. Timing of surveys

- a) Duration of the spring field season: April 1 through April 21. Clean-up day March 31st.
- b) Duration of the fall field season: TBD.
- c) Each field worker must make **two passes** around each building; the first full pass is in one direction and the second full pass is in the opposite direction.
- d) Start surveys in the late afternoon, e.g., 2-3 PM. Studies have shown that (1) most bird-window collisions occur in the morning and early afternoon hours and (2) scavengers tend not to remove carcasses during the day.
- e) Keep an eye on weather forecasts. Complete morning surveys if inclement weather is forecast for the afternoon.

2. Field worker behavior during surveys

- a) Respect the privacy of all building occupants. Remain quiet and do not peer into the windows of buildings. There is a 'zero-tolerance' policy for workers that fail in this regard.
- b) Absolutely no use of mobile devices (cell phones, tablets, etc.) for texting, Internet use, or phone calls. This will reduce a workers ability to detect carcasses. If a text or call must be taken, then stop surveys, be brief, and resume when finished.
- c) Handle carcasses according the protocol below. In addition, click [HERE](#) to view a YouTube video that demonstrates this protocol.

3. List of stuff for workers to bring on surveys

- a) Digital camera (or cameras in smart phones / tablets)
- b) Scissors
- c) Field binder or clip board with building map(s), data sheets, and carcass ID tags
- d) Zip lock (sandwich) body bags: small and large
- e) Plastic grocery bag to temporarily carry carcasses found during surveys

4. How to conduct carcass surveys

- a) Width of transect from building wall is ~6' (or just beyond width of your arms held out horizontal to the ground).
- b) Again, workers must make **two independent passes** around each building with the first full pass in one direction around the building and second pass full goes in the opposite direction.
- c) Search the top, inside, and on the ground around all shrubs. Sift thoroughly within thick ground cover.

5. Carcass collection and containment protocol

Workers must keep their own sequential list of carcass identification numbers. For example, if John Smith were the surveyor, then carcass identification numbers would be JS01, JS02, JS03, etc.

Immediately after a complete or nearly complete carcass is found, field personnel will invert zip lock plastic bags (sandwich bags) and use these bags as 'gloves' to manipulate the carcass into the various positions for photo documentation. THREE pictures must be taken for each bird and file names of the digital pictures must correspond to the workers carcass identification number. Specifically, take one picture each of the bird's ventral (JS01a.jpg), dorsal (JS01b.jpg), and lateral aspects (JS01c.jpg) for identification purposes.

If a partial carcass is found (e.g., feather pile), field workers use the same protocol as above except take only ONE picture (for example, JS02a.jpg). Feather piles left behind by scavengers contain bundles and single feathers from wings and chest, and, to lesser extent, bundles of tail feathers. A few feather piles may contain body parts (wing, tail, and legs) and uneaten soft tissue (e.g., viscera). Feather piles are confined to a roughly circular area with a diameter of up to ~50 cm and should persist in the same spot ≤ 24 hours. Below is a picture of a feather pile.



After pictures are taken, workers should grab the carcass (or all feathers in the case of feather piles) with the inverted zip lock and reverse the bag over the carcass to establish the bag's original position. (Collect all feathers of a partial carcass.) Zip lock the top of the bag and place this bag in another zip lock bag so that the bird is 'double-bagged'. Workers should carry bagged carcasses in a plastic grocery bag until the end of the survey-day (<3 hours), at which time they will be placed in a Biohazard Bag and stored in a laboratory freezer.

6. Data collection in the field and online data reporting

- a) For hard copy data sheets (see above, 1. Preparing for surveys), complete these in the field immediately after a survey regardless of whether or not a carcass was found.
- b) For online Google Form data sheets:
 - 1. Transcribe data from hard copy data sheets
 - 2. Complete one form for each building
- c) Use the Google Folder to upload all carcass pictures.