

HOW TO COLLECT BIRDSTRIKE EVIDENCE



Whole Feathers

"Snarge"
Blood/Tissue

Birdstrike Sample

Whole Carcass

Feathers Fragments

If both whole feathers and 'snarge' are available, collect both types of evidence.
"The more the merrier"

Scrape off all snarge if possible.
If too dry, use alcohol spray to loosen and wipe with paper towel.

NO BLEACH!
NO WATER!

Pull (do not cut) breast, back, wing, and tail feathers

Collect as much material, feathers, fluff, and tissue as possible

ALLOW ALL SAMPLES TO COMPLETELY DRY BEFORE SHIPMENT

REGULAR SHIPMENT
(US Postal Service)

OVERNIGHT SHIPMENT
(FED EX, UPS, DHL)

Smithsonian Institution
Feather Identification Lab
E-600, MRC 116
PO Box 37012
Washington, DC 20013-7012

- Include AFSAS, WESS, or FAA 5200-7 report
- If FOREIGN:
 1. Cert. of Origin
 2. US APHIS permit
 3. Cert. of Treatment

Smithsonian Institution
Feather Identification Lab
E-600, MRC 116
10th & Constitution Ave., NW
Washington, DC 20560

Guidelines For Collecting Birdstrike Material

Feather Identification Lab, Smithsonian Institution

COLLECTING REMAINS

Feathers:

Whole Bird - Pluck a variety of feathers (breast, back, wing, tail)

Partial Bird - Collect a variety of feathers with color or pattern

Feathers only - Send all material available

Do not cut feathers from the bird (we need the downy part at the base of the feathers)

Do not use any sticky substance (no tape or glue)

Tissue/blood (“Snarge”):

Dry material - Scrape or wipe off into a clean re-closeable bag **or** wipe area with pre-packaged alcohol wipe **or** spray with alcohol to loosen material then wipe with clean cloth/gauze. (*please do not use water, bleach, or other cleansers – they destroy DNA)

Fresh material - Wipe area with alcohol wipe and/or clean cloth/gauze **or** apply fresh tissue/blood to an FTA® DNA collecting card

- Always include any feather material available
- Include copy of report (AFSAS, WESS, or FAA 5200-7)
- Always secure all remains in re-sealable plastic bag

SHIPPING

Routine / Non-Damaging Cases *US Postal Service*



Feather Identification Lab
Smithsonian Institution
NHB, E600, MRC 116
P.O. Box 37012
Washington, DC 20013-7012

Priority / Damaging Cases *Overnight Shipping*



Feather Identification Lab
Smithsonian Institution
NHB, E600, MRC 116
10th & Constitution Ave., NW
Washington, DC 20560-0116

WEBSITES

Birdstrike Committee: www.birdstrike.org

Air Force: <http://www.afsc.af.mil/organizations/bash/index.asp>

Civil Aviation: <http://wildlife-mitigation.tc.faa.gov>

Navy: www.safetycenter.navy.mil/aviation/operations/bash

Feather Lab Contact Information

202-633-0801

dovec@si.edu

heackerm@si.edu

dahlanno@si.edu

whattonj@si.edu

"MAKE-YOUR-OWN" - BIRDSTRIKE COLLECTING KITS

Birdstrike Collecting Kits are cheap to make and easy to assemble. Having pre-made kits available improves birdstrike reporting and encourages the sampling of birdstrike remains. Most folks assemble the contents into individual bags or envelopes and keep a supply in field vehicles or office supply cabinets for quick access. Below is a list of recommended items to include in your birdstrike collecting kits; mix and match as budgets permit:

Re-sealable plastic bags

A variety of sizes for various amounts of debris; Re-sealable bags help contain liquids and keeps odors to a minimum.

Sharpie Markers

Permanent markers are water resistant and used for writing data (date, time, aircraft, etc) directly on the bag of remains.

Alcohol Wipes

Pre-packaged alcohol hand-wipes can be used to wipe "snarge" off aircraft. Alcohol is better than water at preserving DNA, preventing mold growth, and is more sanitary for humans. Alternatively, use a spray bottle with 70% alcohol to spray the area before wiping with paper towels.

*Do not use wipes with bleach or other cleansers, it destroys DNA.

FTA® Micro Card and Sterile Applicators

If you send a lot of fresh blood/tissue samples for DNA identification, you may want to look into getting Whatman FTA® DNA cards. The material is sampled with a sterile applicator and placed onto the surface of the card that "fixes" the DNA in the sample. For more information on ordering these items contact the Feather Lab.

*Note: If you only occasionally send blood/tissue samples, a paper towel with alcohol, or alcohol wipe is still a good option for this type of material.

Miscellaneous Items for Birdstrike Collecting

Kitchen shears - good for cutting feet, wings, bills

Tongue depressors, tweezers, cotton swabs/cotton-tipped applicators

Hand cleaners, or other alcohol based gel hand sanitizers.

(collecting kits cont.)

Extra Safety Items

Latex Gloves

Protective Eyewear

Face Masks: Regular surgical-type hygiene masks. If avian flu is a concern, the Center for Disease Control recommends NIOSH rated N95 face masks. (These may be referred to as respirators.) There is a disposable version of these masks by 3M that looks similar to the regular "cup" style face masks.

Hand sanitizing gels

Reminders

Always encourage proper hygiene & provide personnel easy access to cleaning/hygiene supplies.

Do not cut off the fluffy down at the bottom of feathers.

Do not use water, bleach or other cleansers on samples.

Be sure personnel are briefed on proper carcass disposal protocols.

Stay informed to the status of the HPAI H5N1 avian flu virus.

The following websites have excellent coverage on current avian flu info:

U.S. Geological Survey Wildlife Health Center

<http://www.nwhc.usgs.gov/>

Centers for Disease Control and Prevention

<http://www.cdc.gov/flu/avian/gen-info/facts.htm>

The American Ornithologists' Union Ornithological Council

<http://www.nmnh.si.edu/BIRDNET/OC/avianinfluenza.html>



Smithsonian

Contact Information:

The Feather Identification Lab

Smithsonian Institution

MRC 116, E-600,

PO Box 37012

Washington, DC 20013-7012

(202) 633-0801

Email:

dovec@si.edu

heackerm@si.edu

dahlanno@si.edu

whattonj@si.edu

(rev 09/09 jfw)

Whatman FTA® DNA collecting cards

Whatman FTA® DNA cards are a good option for collecting birdstrike remains that consist of mostly blood and tissue. To purchase the supplies needed, contact the sales reps at Government Scientific Source, Inc.:

U.S. Air Force and Navy-
Nicole White
1-800-248-8030 ext. 151
nwhite@govsci.com

USDA WS and Airport Ops/Operators -
Todd Carl
1-800-248-8030 ext. 170
tcarl@govsci.com

The supplies needed are:

FTA® Micro Indicating Cards (one circle)

Item # WB120211

Sterile Foam-tipped Applicators

Item # WB100032

The FTA® cards need to be kept dry & secure after sampling. We recommend putting the card in a small re-sealable plastic bag for shipping. If FTA® cards are not an option for collecting fresh “snarge”, we recommend using alcohol to wipe the remains from the area. Pre-packaged alcohol wipes are fine. Please no water, bleach, or other cleansers. If remains are dry there is no need for alcohol (dried tissue also works well for DNA analysis).

FTA® CARD DNA COLLECTION FOR BIRDSTRIKE IDENTIFICATION

- 1) Use foam tip of sterile applicator to wipe snarge / blood from surface.
- 2) Open FTA® card and press the foam tip of applicator with material onto the circle sample area of the card using light pressure. Without lifting the foam tip from the card, rock the applicator tip side-to-side until sample area is saturated.
 - Use one card for each impact point; label accordingly
- 3) Allow the sample area of the card to air dry (recommend dry for 30 minutes)
 - Keep the sterile applicator and send with card.
 - Label card with report number or incident information.
- 4) Place card and sterile applicator in clean re-sealable plastic bag.
 - If whole feather material is present in birdstrike remains, send in a separate plastic bag with the card & applicator.
- 5) Place all material in mailing envelope with a copy of the bird strike report and send to the Feather Lab.

The use of latex gloves, face masks and eye protection is encouraged when working with birdstrike remains. Always practice good hygiene before and after handling remains by thoroughly washing hands with soap and/or using gel hand sanitizer. (5/09)