Criteria for submitting avian morbidity and mortality cases to the National Wildlife Health Center



As part of its duties, the Field Investigation Team (FIT) at the USGS National Wildlife Health Center (NWHC) provides avian morbidity and mortality event investigation capacities to all divisions of the USFWS. These capacities include case consultation to collaboratively determine the best course of action and conducting field investigations at the refuge upon request.

Submission and diagnosis of avian disease cases is extremely important in identifying the causes of mortality in our wild bird populations. This information helps us to: a) determine the impacts mortality events have on avian populations, b) identify hotspots of disease on the landscape, c) develop management strategies to lessen the impacts of disease, and d) provide early warning for agents that may cause disease in livestock or humans.

The following document outlines how to submit cases to the NWHC, how the process works, and how the results will be reported back to your station.

CONTACTING THE NWHC FIT TEAM



- Western U.S.: Barb Bodenstein, 608 270 2447, bbodenstein@usgs.gov
- Central U.S.: Dr. LeAnn White, 608 270 2491, clwhite@usgs.gov
- Eastern U.S.: Dr. Anne Ballmann, 608 270 2445, aballmann@usgs.gov
- Hawaii, Pacific Islands: Dr. Thierry Work, 808 792 9520, thierry work@usgs.gov
- Nationwide, single animal cases only: Jennifer Bradsby, 608 270 2443, jbradsby@usgs.gov

It is imperative that the NWHC is notified prior to shipment of carcasses or diagnostic material. This is accomplished by contacting the appropriate FIT member listed above. Please do not ship material to the NWHC until you have communicated with a FIT member and they have agreed to receive the material.

If you are unable to reach the lab, or have further questions regarding an avian health event, please do not hesitate to contact your Regional Coordinator for the USFWS's Avian Health and Disease Program. Contact information can be found at the end of this document.

SEQUENCE OF EVENTS

- FWS staff should contact a NWHC FIT member via E-mail, telephone, off hour's
 message, front desk (phone message) or direct contact at meetings or workshops. On
 occasion, the FIT may initiate contact with the FWS based on reports or media articles
 on a wildlife mortality event.
- 2. **The FWS submitter discusses the situation with the FIT**. A general history of the wildlife morbidity or mortality is collected with the following information:
 - Specific die-off location (refuge unit, address, lake, river, etc.)
 - Species affected (The diversity of species affected may provide clues to the disease involved)
 - Date collected
 - Collector's contact information (name, phone number, email address, mailing address)
 - Method of animal collection [found dead, euthanized (describe method) etc.]
 - Species and number available, and condition (chilled, frozen, preserved tissues, etc)
 - Problem area description: (Land use, habitat types, and other distinctive features)
 - Environmental factors (Record conditions such as storms, precipitation, temperature changes, or other changes that may contribute to stress)
 - Disease onset/end date (Best estimate)
 - Age/sex (Any pattern noticed related to age and sex)
 - Known dead/sick (Actual number counted)
 - Estimated dead/sick (Consider removal by scavengers, density of vegetation, etc.)
 - o Clinical signs (Any unusual behavior and physical appearance)
 - Population at risk (Number of animals in the area that could be exposed to disease)
 - Population movement (Recent changes in animal numbers in area; migration source/destination)
 - Comments (Additional information/observations of value, such as past occurrences of disease in area, photographs, and videos)
 - Carcass condition (the level of decomposition (rot) of the carcass) is an
 important consideration for submission. It is important that the submitter have
 a clear idea of condition of the carcass (photographs are very helpful).
 - Generally, the more advanced decomposition becomes, the less likely it will be to accurately determine a cause of death or obtain other useable information.
 - However, depending upon the circumstances surrounding the event (endangered or extremely rare species, high profile location, high profile disease, etc.) even carcasses in poor condition can still be useful.

- 3. Based on the information provided by the FWS submitter and a discussion with the FIT member, **the case is triaged** to determine the most appropriate course of action for diagnostic evaluation.
 - In most instances, the FIT will request that animals be shipped to NWHC for diagnostic evaluation.
 - The number of animals needed for examination, species to select, preservation method (i.e., fresh, chilled, frozen, etc.) and shipping details are determined through discussion with the FIT before shipment.
 - For suspected legal cases, it may be more appropriate to contact USFWS Law Enforcement Special Agent and send carcasses directly to the USFWS Forensics Laboratory. The FIT can provide advice on contacting the Forensics Laboratory.
 - Wildlife in captivity are not generally accepted unless they are a species of concern, a recovery plan is in place, or they have been held captive for less than 72 hrs and have not received drug therapy.
- 4. A specimen history form must be filled out by the FWS submitter. Print out the history form, place it in a ziplock bag, and put it in the box with the carcass or diagnostic material. Also, please email a copy of the history form to the FIT member. The latest form and instructions can be found on the NWHC website (http://www.nwhc.usgs.gov/mortality_events/reporting.jsp) or a FIT member can email them to the submitter.

CASE RESULTS COMMUNICATIONS

- 1. The FIT will be in timely contact directly with the submitters via telephone consultation as well as provide "Findings to Date" electronic reports via email relaying diagnostic results and their interpretation and significance to the field situation.
- 2. Disease control actions will be discussed and modified depending on the evolution of the outbreak and the diagnostic results.
- 3. Final reports will be submitted electronically to the submitter and other designated FWS contacts.
- 4. On those occasions when a reportable disease is identified in a wildlife carcass sent to the NWHC, the appropriate federal and state agencies will be notified.
- 5. If a carcass submitted to the NWHC is discovered (after it has been received) to be associated with illegal activity, the FIT will contact the appropriate FWS Law Enforcement agent to discuss initiating a legal investigation. If a legal case is established, then the submitter will be notified of the special agent's contact details and all further communications about the case will only be to the special agent until the case is resolved.
- 6. Submitter's may contact the FIT member at any time to enquire about the status of a submitted case.



Avian Health and Disease Program

Division of Migratory Bird Management



CONTACT INFORMATION:

National Coordinator

Samantha E. J. Gibbs, DVM PhD
National Avian Health and Disease Program
Coordinator
Division of Migratory Bird Management
U.S. Fish and Wildlife Service
4401 North Fairfax Drive, Mail Stop 4107
Arlington, VA 22203-1610, USA
571-216-5776 (Blackberry)
samantha gibbs@fws.gov

Region 1

Jenny Hoskins
USFWS Region 1 Migratory Birds and Habitat
Programs
911 NE 11th Avenue
Portland, OR 97232
503-231-6716 (Office)
Jenny Hoskins@fws.gov

Region 2

Dan Collins
Migratory Gamebird Coordinator
USFWS-Region 2
P. O. Box 1306
Albuquerque, NM 87103
Phone: (505) 248-6881
Dan Collins@fws.gov

Region 3

Sean Kelly Fish and Wildlife Service BHW Federal Building 1 Federal Drive Fort Snelling, MN. 55111 Phone: 612-713-5470 Sean Kelly@fws.gov

Region 4

John Stanton (NC, SC, GA, FL, Caribbean)
South Atlantic Migratory Bird
Coordination Office
185 Keiser Drive
P.O. Box 210
Columbia, NC 27925
252-796-2400 (office)
John Stanton@fws.gov

Randy Wilson (**KY, AL, TN, AR, MS, LA**) Station Leader, Migratory Bird Field Office U.S. Fish and Wildlife Service 6578 Dogwood View Parkway, Suite B Jackson, MS 39213 601.965.4903 ext 15 (Office) Randy Wilson@fws.gov

Region 5

Chris Dwyer
Migratory Gamebird Biologist
Northeast Region, U.S. Fish and Wildlife
Service
300 Westgate Center Drive
Hadley, MA 01035-9589
413-253-8706 (Office)
Chris Dwyer@fws.gov

Region 6

Tom Roffe, PhD, DVM Chief, Wildlife Health US Fish and Wildlife Service 1400 S. 19th Ave Bozeman, MT 59718 406-994-5789 (Office) Thomas Roffe@fws.gov

Region 7

Kim Trust
Non-Game Migratory Bird Coordinator-R7
US Fish and Wildlife Service
1011 East Tudor Road
Anchorage, AK 99503
907-786-3398 (Office)
Kim Trust@fws.gov

Region 8

Marie Strassburger Regional Migratory Bird Chief US Fish and Wildlife Service 2800 Cottage Way Sacramento, CA 95825 916/414-6727 916/414-6486 (fax) Marie E Strassburger@fws.gov