

Alaska Interagency Preliminary Coordination and Communication Plan for Morbidity and Mortality Events in Wild Birds

Introduction

This response plan is meant to provide a general framework for investigating avian mortality. Numbers of birds and various other triggering criteria are for general guidance only. It is meant to be followed by trained agency personnel for the collection and/or disposal of dead or sick wild birds.

Avian influenza is a type A influenza virus that is commonly found in certain species of waterfowl and shorebirds. A particularly virulent strain of highly pathogenic avian influenza (HPAI H5N1) has spread throughout a large geographic area in Asia, Europe, and Africa. The designation of high or low pathogenic avian influenza refers to the potential for these viruses to kill domestic poultry, not how infectious the viruses may be to humans, wild birds, or other animals. There are a number of pathways through which the virus could be brought to North America, including introduction by wild migratory birds.

A detection of H5N1 in wild birds may result from a wild bird mortality event or alternatively, may occur through routine surveillance testing of individual, apparently healthy live birds that subsequently may be released after a sample is collected. The possibility of detecting the virus through morbidity and mortality events necessitates a response plan for detecting and responding to such events.

Detection of H5N1 also may occur in testing or mortalities of domestic birds. Surveillance and response for domestic birds is managed by the State Veterinarian (Alaska Dept. of Environmental Conservation) and USDA Veterinary Services. All reports of sick or dead domestic birds should be reported to these offices (see Appendix A).

What constitutes an event?

Mortality events will be assessed based on taxonomy, habitat, and circumstances; the significance of bird deaths and nature of responses will be evaluated on a case-by-case basis. The mortality events are not exclusive to the 26 priority species identified in the interagency avian influenza sampling plan but can include any number or type of birds.

There is considerable variation between species susceptibility and response to any given disease. This, combined with the different behaviors, ecology, geography, migratory pathways, and interactions among and between species, presents a very complex picture of avian influenza and associated risks for spread via migratory birds.

Communications

Interagency toll-free line in Anchorage 1-866-5BRD FLU (1-866-527-3358)

There is a dedicated toll-free line in Anchorage that is staffed to receive calls regarding dead birds during business hours. A phone tree is used by personnel to contact the proper authorities when appropriate. Calls are logged into a database that will have GIS capability to determine clusters of dead birds. State wildlife veterinarians will monitor logs received into the toll-free line at regular intervals. The criterion for

requesting calls from agency personnel or the public to the toll-free line is: **fresh dead wild bird(s) without obvious cause of death by injury/trauma.**

National Wildlife Health Center

The National Wildlife Health Center (NWHC) provides technical support and information to facilitate decisions affecting wildlife and ecosystem health. The NWHC is available for consultation regarding wildlife mortality events and other wildlife health concerns (see Appendix B). With regard to surveillance for HPAI avian influenza, the NWHC will provide direction on collection, preservation, and shipment of carcasses for necropsy (see Attachment 8 in the U.S. Interagency Plan) and will conduct on-site field investigations as appropriate.

Criteria triggering call to NWHC

When mortality is reported (above), the hotline staffer will transmit the information to appropriate staff (FWS, NPS, ADF&G, ADEC), who will initiate a call to the NWHC; a determination will be made whether or not carcasses or swabs will be shipped to NWHC for necropsy. The NWHC will make every effort to accept birds and conduct full examinations (as warranted) including testing for avian influenza viruses.

Response

Criteria triggering field response to mortality

Decisions about whether to respond and the nature of response will be based on scope, species and other factors. For example, the following circumstances will receive priority attention:

- Waterfowl and shorebirds: 3 or more dead in a local area.
- Gulls and seabirds: 3 or more dead in a local area where mortality is normally not found.
- Swans, eagles, and other raptors: one or more dead.
- Others: 5 or more dead in a local area within several days. Can include raptors, passerines, upland game birds, etc.

Response coordination

When a high priority event is reported or detected, key contacts of the Alaska Steering Committee (Appendix A including the NWHC) will consult to designate a “lead agency,” based on land ownership and response capabilities, and to determine the nature and degree of participation in an initial response. The committee will consider a variety of factors, including those listed above under “Field information to record” (Appendix B) in making a decision to conduct a field response. The lead agency will initiate logistics and staff assignments for first response. The first response objective will be to secure the mortality site and obtain fresh specimens.

If the committee, in consultation with NWHC and staff veterinarians, determines that an immediate formal disease investigation is warranted, NWHC will mobilize an investigation team, and veterinarians from ADEC, ADF&G, and USDA will provide professional support.

Carcass collection and handling for submitting bird for testing

Wild birds can carry several diseases that are infectious to people and some simple precautions should minimize the risk of infection. Dead or sick wild birds should not be handled by the public and these guidelines are intended for trained professionals. See guidelines for various incident levels, as indicated in NWHC Wildlife Health Bulletin 05-03 (Appendix D). If you have to move a dead wild bird:

- Avoid touching the bird with your bare hands.
- If possible, wear disposable protective gloves when picking up and handling. If disposable gloves are not available, a plastic bag can be used as a make-shift glove. When the dead bird has been picked up, the bag can be turned back on itself and tied.
- Place the dead bird in a suitable plastic bag, preferably leak proof. Care should be taken not to contaminate the outside of the bag.
- Tie the bag and place it in a second plastic bag.
- Bird should be sent immediately to the appropriate laboratory for testing. If bird cannot be shipped immediately, bird should be kept and shipped frozen.
- Line a sturdy shipping container with another plastic bag, and pack the double bagged specimens alternately with blue ice packs and some crumpled newspaper or absorbent material. Secure the bag used as a liner for the shipping container. Add more crumpled paper to prevent shifting of the samples if necessary. Include specimen history form (Appendix C) in a separate sealed plastic bag and tape shut the container then attach shipping label. Mark the package KEEP COLD. Ship package via overnight delivery service.
- Any clothing that has been in contact with the dead bird should be washed using ordinary washing detergent at the temperature normally used for washing the clothing. Clothing worn while collecting carcasses from a die-off should be placed in a plastic bag and washed separately from family laundry
- Any contaminated indoor surfaces should be thoroughly cleaned with normal household cleaner.

Carcass collection and disposal

- Avoid touching the bird with your bare hands.
- If possible, wear disposable protective gloves when picking up and handling. If disposable gloves are not available, a plastic bag can be used as a make-shift glove. When the dead bird has been picked up, the bag can be turned back on itself and tied.
- Place the dead bird in a suitable plastic bag, preferably leak proof. Care should be taken not to contaminate the outside of the bag.
- Tie the bag and place it in a second plastic bag.
- Remove gloves by turning them inside out and then place them in the second plastic bag. Tie the bag and dispose of in the normal household refuse bin
- Hands should then be washed thoroughly with soap and water.
- Alternatively, the dead bird can be buried, but not in a plastic bag. Bury the bird away from public areas and water sources, cover the site to prevent animals from digging up the carcass.

- Any clothing that has been in contact with the dead bird should be washed using ordinary washing detergent at the temperature normally used for washing the clothing. Clothing worn while collecting carcasses from a die-off should be placed in a plastic bag and washed separately from family laundry
- Any contaminated indoor surfaces should be thoroughly cleaned with normal household cleaner.

Precautions

The general public should not pick up diseased or dead wildlife. Contact the inter-agency bird hot line (1-866-527-3358) if a sick or dead animal is found.

Birds and other wildlife can carry diseases that also may affect humans. Levels of personal protective equipment that are required for field staff are prescribed by policy of participating agencies, but the minimum protocol should be followed when handling sick or dead birds and include:

- Wear rubber or latex gloves that can be disinfected or discarded and protective eyewear or a face shield while handling animals.
- Do not eat, drink, or smoke while handling animals.
- Wash hands thoroughly after handling animals.

Agreeing Agencies

Alaska Department of Environmental Conservation
Alaska Department of Fish and Game
National Park Service
U. S. Department of Agriculture
U. S. Fish and Wildlife Service
U. S. Geological Survey

Appendix:

- A. Key Contacts for Alaska Bird Steering Committee
- B. USGS-NWHC Bulletin 06-02 Wild Bird Reporting
- C. USGS-NWHC Specimen History Form
- D. USGS-NWHC Bulletin 05-03 Interim Guidelines for PPE
- E. Alaska Sick/Dead Wild Bird Observation Form

Appendix A

Key Contacts for Interagency Response

The following technical staff contacts are responsible for coordinating and initiating responses to bird disease and mortality events in Alaska. These individuals will advise and coordinate with their respective administrators as established by internal and interagency protocols.

Alaska Dept. of Environmental Conservation

Dr. Robert Gerlach, State Veterinarian
Office: (907) 375-8214
Cell: (907) 632-2558

Alaska Dept. of Fish and Game

Tom Rothe, Waterfowl Coordinator
Office: (907) 267-2206
Cell: (907) 240-1717

Dr. Kimberlee Beckmen, DVM

Office: (907) 459-7257
Cell: (907) 322-2384

National Park Service

Terry DeBruyn
Office: (907) 644-3443

Dr. Margaret Wild, DVM

Office: 225-3593

U. S. Dept. of Agriculture Wildlife Services

Corey Rossi, District Supervisor
Office: (907) 745-0871
Cell: (907) 355-2473

U. S. Dept. of Agriculture Veterinary Services

Dr. Mike Philo, DVM
Office: (907) 349-0125
Cell: (907)

U. S. Fish and Wildlife Service

Deborah Rocque, Regional AI Coordinator
Office: (907) 786-3398
Cell: (907) 382-2775

U. S. Geological Survey Alaska Science Center

Dirk Derksen
Office: (907) 786-3531

U. S. Geological Survey National Wildlife Health Center

Dr. Rex Sohn, DVM
Office: (608) 270-2447

Appendix B



Wildlife Health Bulletin 06-02

USGS National Wildlife
Health Center
6006 Schroeder Rd.
Madison, WI 53711
608-270-2400
www.nwhc.usgs.gov

To: Natural Resource/Conservation Managers
From: Leslie Dierauf, Director, USGS National Wildlife Health Center
Title: Wild bird mortality reporting
Date: June 16, 2006

This bulletin provides guidance to wildlife professionals on contacting the USGS National Wildlife Health Center (NWHC) to report wild bird die-offs and offers suggestions for interacting with the general public about reporting dead birds.

The National Plan for the *Early Detection of Highly Pathogenic H5N1 Avian Influenza (HPAI H5N1) in Wild Migratory Birds* emphasizes systematic investigation of wild bird die-offs and disease events as one of the earliest opportunities to detect HPAI H5N1, if it is introduced by migratory birds into the United States. State natural resource agencies and Federal land managers are the principal authorities in positions to detect and respond to mortality events involving wild birds. The National Plan calls for reporting wild bird mortality through appropriate channels within each State, Federal, or Tribal entity to the NWHC. The NWHC is enlisting your support to:

- 1) Report wild bird mortality events to the NWHC;**
- 2) Work with the NWHC to submit appropriate specimens for examination and testing;**
- 3) Work with the public to provide information on how to report wild bird mortality, and when appropriate, submit specimens for testing, and safely dispose of dead birds not needed for testing.**

For this effort to be successful, we request that Federal, State and Tribal resource agencies report wild bird mortality to one of the NWHC Field Investigations Team (FIT) members listed below. FIT members will provide suggested criteria for reporting wild bird mortality; determine if carcasses should be submitted to NWHC for necropsy evaluation and testing; and if requested, assist agencies in developing mortality management plans and on-site field investigations. FIT personnel will also provide information about avian influenza and guidance for handling wild bird carcasses, and can provide additional information about the national surveillance strategy.

Please contact a NWHC Field Investigations Team (FIT) member for assistance:
Rex Sohn, Western U.S., 608-270-2447
Kathryn Converse, Central U.S., 608-270-2445
Grace McLaughlin, Eastern U.S., 608-270-2446
Thierry Work, Hawaii/Pacific Islands, 808-792-9520

Call 608-270-2400 to leave a message outside NWHC business hours (8 a.m. – 4:30 p.m. CST).

Wild Bird Die-offs to Report

The NWHC investigates the cause of death for wild birds and other wildlife, including testing for HPAI H5N1. The significance of a mortality event depends on species involved, time of year, migratory bird movements, previous mortality in the area, number of dead birds, and suspected diagnoses. Waterfowl, shorebirds, and other species that migrate to North America from Asia or Europe, or associate with those species, are considered to be at higher risk for carrying HPAI H5N1; therefore, reports of mortality in certain target species need to be given the highest reporting priority. For a listing of bird species considered to be at higher risk for transmitting HPAI H5N1 to the United States, see the H5N1 U.S. Interagency Strategic Plan at http://www.nwhc.usgs.gov/publications/ai/Final_Wild_Bird_Strategic_Plan_0322.pdf Tables with species lists begin on page 23. Note that if federally endangered or threatened species are involved, single mortalities should be reported.

We encourage Federal, State and Tribal agencies to also work with their respective State wildlife veterinarian, public and/or agriculture health agencies regarding reports of wild bird mortality and/or bird carcasses.

To make reporting easier, a USGS NWHC Wildlife Reporting Form is attached for your use in reporting wildlife mortality.

Guidance for Public Reporting of Wild Bird Die-offs

When contacted by the general public about finding dead birds, we suggest instructing them not to touch the carcass with their bare hands. If the animal must be moved for submission or disposal, the individual should use disposable gloves or an inverted plastic bag to pick up the dead animal, and wash their hands thoroughly afterwards. If the carcass is not being submitted for evaluation, we recommend that it be double-bagged and placed in a secure trash receptacle for routine garbage pickup. We also stress the importance of avoiding exposure of dead animals to children, pets, and other wildlife.

We recommend mentioning to the public that there are many causes of death for wild birds, that mortality events happen every year, and that there have been no documented cases of highly pathogenic avian influenza in North America to date.

The HPAI H5N1 virus does not easily infect people; nevertheless, all dead carcasses should be treated with care.

In determining whether or not to retrieve or accept carcasses, we recommend that you take into consideration the location of the event, species of birds involved, size of the event, and condition of the carcasses. When a decision is made not to accept or retrieve carcasses, thank the individual for their information and explain that the information is very useful to our monitoring effort, but that we are unable to collect and test all wild bird mortalities.

For guidelines on handling wild birds, please refer to the NWHC Wildlife Health Bulletin 05-03, *Interim Guidelines for the Protection of Persons Handling Wild Birds With Reference to Highly Pathogenic Avian Influenza H5N1* available at: http://www.nwhc.usgs.gov/publications/wildlife_health_bulletins/WHB_05_03.jsp

Appendix C



National Wildlife Health Center
6006 Schroeder Road
Madison, WI 53711
Phone: 608.270.2400
FAX: 608.270.2415

SPECIMEN HISTORY FORM

Please FAX or e-mail to an USGS Field Investigation Team member (below) before shipping
Western States Rex Sohn rsohn@usgs.gov, 608-270-2447
Central Kathryn Converse kathy_converse@usgs.gov, 608-270-2445
Eastern Grace McLaughlin gmclaughlin@usgs.gov, 608-270-2446

Submitter's name:

Affiliation:

Address:

Telephone:

E-mail:

Date collected:

Collector's Name:

Method of animal collection: [found dead, euthanized (describe method) etc.]

Species and Number Submitted:

Specific die-off location:

State:

County:

Latitude/longitude:

Environmental factors: (Record conditions such as storms, precipitation, temperature changes, or other changes that may contribute to stress.)

Disease onset: (Best estimate)

Disease end: (Estimate when ended)

Species affected: (The diversity of species affected may provide clues to the disease involved.)

Age/sex: (Any pattern noticed that is related to age and sex?)

Known dead: (Actual number counted)
animals:

Known sick:

Ratio of sick/dead

Estimated dead: (Consider removal by scavengers or other means.)

Clinical signs: (Any unusual behavior and physical appearance.)

Population at risk: (Number of animals in the area that could be exposed to the disease.)

Population movement: (Recent changes in number of animals on area and their source or destination, if known.)

Problem area description: (Land use, habitat types, and other distinctive features.)

Comments: (Additional information/observations of value such as past occurrences of disease in area, photographs and videos are great additions.)

Appendix D

Wildlife Health Bulletin #05-03

To: Natural Resource/Conservation Managers

From: Leslie Dierauf, Director, USGS National Wildlife Health Center

Title: Interim Guidelines for the Protection of Persons Handling Wild Birds With Reference to Highly Pathogenic Avian Influenza H5N1

Date: August 29, 2005

These Guidelines have been developed in consultation with the Centers for Disease Control and Prevention. They are advisory in nature and intended to provide guidance for field biologists and others working with or handling wild birds with specific reference to highly pathogenic avian influenza. The guidance reflects information available as of August 2005 and may be updated as more information becomes available.

Highly Pathogenic Avian Influenza H5N1

To date, Highly Pathogenic Avian Influenza A H5N1 has not been detected in humans, poultry or wild birds in North America and no data suggest that H5N1 should be suspected of being in North America or in wild birds migrating from Asia to North America this fall (2005).

Avian influenza, or bird flu, is a virus typically found in wild birds, especially waterfowl and shorebirds. The virus is only found in a small number of birds in the wild, and generally does not cause clinical signs of disease. The virus is shed in fecal droppings, saliva and nasal discharges. Since 2003, a particularly virulent strain of this virus has emerged in Asia—the highly pathogenic avian influenza (HPAI) H5N1 virus. The HPAI H5N1 virus probably originated from domestic poultry in that region and is of concern because: 1) it poses a threat to domestic poultry, especially chickens; and 2) it has caused illness in 112 persons, including the deaths of at least 57 people as of August 2005. Most human cases are thought to have become infected with the virus through direct handling of infected poultry, consumption of uncooked poultry products, or contact with virus-contaminated surfaces/materials. However, to date, the risk of H5N1 transmission to people through direct contact with infected poultry remains very low. Probable, limited person-to-person transmission of H5N1 viruses in a small number of cases has been reported.

There are an increasing number of reports that HPAI H5N1 is infecting and causing death in wild birds, including some migratory species. These events and the associated spread of the H5N1 virus to new geographical areas in Asia have created concerns and questions about the possibility that the H5N1 virus could be carried into North America in migratory birds.

These Guidelines provide advice about practices and precautions people should exercise to mitigate the risk of HPAI H5N1 viral infection based on the level of exposure to wild birds. Because situations can change quickly, we have included recommendations for handling wild birds in the event that HPAI H5N1 is detected. It is important to check with your respective public health, animal health, and natural resource agencies for up-to-date information on HPAI H5N1.

There is no known case where H5N1 has been transmitted from wild birds to humans. However, even apparently healthy wild birds can be infected with microorganisms other

than HPAI, some of which are currently of more concern to human health in North America than HPAI H5N1.

Recommendations:

Thoroughly washing hands with soap and water (or with alcohol-based hand products if the hands are not visibly soiled) is a very effective method for inactivating influenza viruses, including HPAI. These viruses are also inactivated with many common disinfectants such as detergents, 10% household bleach, alcohol or other commercial disinfectants. The virus is more difficult to inactivate in organic material such as feces or soil.

The **General Public** should, as a general rule, observe wildlife, including wild birds, from a distance. This protects you from possible exposure to pathogens and minimizes disturbance to the animal.

- Avoid touching wildlife. If there is contact with wildlife do not rub eyes, eat, drink, or smoke before washing hands with soap and water as described above.
- Do not pick up diseased or dead wildlife. Contact your state, tribal or federal natural resource agency if a sick or dead animal is found.

Hunters should follow **routine precautions** when handling game.

- Do not handle or eat sick game.
- Wear rubber or disposable latex gloves while handling and cleaning game, wash hands as described above, and thoroughly clean knives, equipment and surfaces that come in contact with game.
- Do not eat, drink, or smoke while handling animals.
- All game should be thoroughly cooked (well done or 160° F). Additional information can be found at:

www.who.int/entity/foodsafety/fs_management/No_02_Avianinfluenza_Dec04_en.pdf.

Field Biologists handling apparently healthy wild birds in areas where HPAI H5N1 is not suspected should work in well-ventilated areas if working indoors. When working outdoors work upwind of animals, to the extent practical, to decrease the risk of inhaling aerosols such as dust, feathers, or dander.

- When possible, wear rubber or latex gloves that can be disinfected or discarded and protective eyewear or a face shield while handling animals.
- Wash hands often as described above, and disinfect work surfaces and equipment between sites.
- Do not eat, drink, or smoke while handling animals.

Field Biologists handling sick or dead birds associated with a mortality event should:

- Follow the recommendations above and at a minimum wear protective clothing, including coveralls, rubber boots, latex or rubber gloves that can be disinfected or discarded.
- Minimize exposure to mucosal membranes by wearing protective eyewear (goggles) and a particulate surgical mask (NIOSH N95 respirator/mask is preferable).
- Decontaminate work areas and properly dispose of potentially infectious material including carcasses. For additional information see the USGS Field Guide to Wildlife Diseases:

http://www.nwhc.usgs.gov/publications/field_manual/chapter_4.pdf

- Do not eat, drink, or smoke while handling animals.

Recommendations if HPAI is detected in North America

Field Biologists working with wild birds in areas where HPAI H5N1 has been detected, particularly during disease control operations, should consult with a health care provider and follow the latest guidelines from CDC and the WHO for prophylactic medications and precautions for persons involved in avian influenza disease control:

http://www.who.int/entity/csr/disease/avian_influenza/guidelines/Avian%20Influenza.pdf, <http://www.cdc.gov/flu/avian/professional/protect-guid.htm>

- Follow the recommendations above and the basic guidelines for infection control, including how to put on and use, remove, disinfect or dispose of personal protective equipment and clothing.
- Wash hands frequently and disinfect exposed surfaces and field equipment between work sites.
- Do not eat, drink, or smoke while handling animals.
- Wear coveralls, gloves, shoe covers, or boots that can be disinfected or discarded, a respirator (NIOSH N95 respirator/mask is preferable) and protective eyewear (goggles).
- Monitor your health for clinical signs of influenza infection during and for one week after your last exposure to potentially HPAI virus-infected or exposed birds.
- Contact your healthcare provider if you develop fever, flu-like symptoms or conjunctivitis (eye inflammation). Inform them prior to arrival that you have potentially been exposed to HPAI.

Appendix E

ALASKA SICK/DEAD WILD BIRD OBSERVATION			
Please report all sick or dead wild bird for which there is no apparent cause. 866-5BRDFLU (866.527.3358) Or fax a completed report to 907.768.3641	US Fish and Wildlife Service Migratory Birds Avian Influenza Department 1011 East Tudor Road Mail Stop 201 Anchorage, AK 99503	US National Park Service Biological Resources Avian Influenza Department 240 West 5th Avenue Anchorage, AK 99501	US Geological Survey National Wildlife Health Center 6008 Schroeder Road Madison, WI 53711 808 270 2400
For more information on Avian Influenza related activities in AK: http://alaska.fws.gov/media/avian_influenza/index.htm			
For human health related questions, please refer to the State Public Health Department 888-8PANFLU (888 972 6358).			
Please submit photos taken during your observation. Photos may help us determine the bird species and condition surrounding the bird illness or death. Please email photos to akr_birdflu@nps.gov or send to the NPS address above.			

Observation Date Number of Birds State of Bird(s)

FOUND BY

First Name Last Name

Address

City State Zip Code

Email

Home Phone Work Phone

SUBMITTED BY

Same as above

First Name Last Name

Address

City State Zip Code

Email

Home Phone Work Phone

LOCATION OF OBSERVATION

Please be as specific as possible

GPS Latitude GPS Longitude GPS Datum

Nearest Address or Landmark

Distance from Address or Landmark Miles

Directions from Address or Landmark

BIRD SPECIES

If species is known, please indicate below			If species is not known, please provide a description
Bird Type	# Observed	Species	Bird Description Select all that apply
Waterfowl			Size Very Small (less than 5 inches) <input type="checkbox"/> Small (5 to 9 inches) <input type="checkbox"/>
Shorebirds			Medium (9 to 16 inches) <input type="checkbox"/> Large (16 to 32 inches) <input type="checkbox"/> Very Large (32 to 72 inches) <input type="checkbox"/>
Gulls & Terns			Color Black <input type="checkbox"/> Blue <input type="checkbox"/> Brown <input type="checkbox"/>
Marine Birds			Buff <input type="checkbox"/> Gray <input type="checkbox"/> Green <input type="checkbox"/> Olive <input type="checkbox"/>
Upland Gamebirds			Orange <input type="checkbox"/> Pink <input type="checkbox"/> Purple <input type="checkbox"/> Red <input type="checkbox"/>
Cranes			Rust <input type="checkbox"/> Tan <input type="checkbox"/> White <input type="checkbox"/> Yellow <input type="checkbox"/>
Songbirds			Please describe additional characteristics such as webbed feet and shape and size of wings, tail, bill, etc.
Raptors			
Other			

BIRD CONDITION

Clear eyes Cloudy eyes Sunken eyes Maggots/fly eggs present
 Foul odor emanating from body of bird Observed dead for more than 12 hours Body scavenged/viscera absent Visible external injuries

Please describe additional conditions such as sign of struggle, disease, etc.

HABITAT / ENVIRONMENTAL FACTORS

Forest Brush Meadow Tundra Marsh
 Barren In Water Riverine Lake Shore Intertidal
 Urban Developed Agriculture Mining
 Recent Rain Recent Snow Unexpected Precipitation Sudden Changes in Temperature Drought

Odor coming off nearby water Water level recently gone up/down People visit the area Unknown

Please describe additional habitat or environmental factors such as nearby electrical wires, windows, recent storms, etc.

For Internal Use Only

Received By	Date	Agency	DB Record #
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