USDA Animal and Plant Health Inspection Service
U.S. DEPARTMENT OF AGRICULTURE

RESPONSE PLAYBOOK

New World Screwworm

April 2026 v2

Target Audiences

- Federal, State, Territorial and Tribal Animal Health and Wildlife Officials
- NWS Outbreak Responders
- Other Federal, State, Territorial and Tribal Officials

Purpose

- Provide quick, practical access to key activities, resources, and tools[1] to implement an NWS outbreak response and surveillance activities.
- Describe the adaptive response approach, which is the practice of dynamically adapting outbreak response activities from confirmation to control and eradication.

[1] See Definitions.

User Guide

OVERVIEW OF NWS RESPONSE

New World screwworm (NWS) is a devastating pest and is a threat to U.S. agriculture, wildlife, public health, and the economy. NWS is considered a U.S. foreign animal disease (FAD) that is immediately reportable under the United States Department of Agriculture (USDA) Animal and Plant Health Inspection Service (APHIS) National List of Reportable Animal Diseases. **While NWS myiasis is not a food safety concern**, NWS will have immediate interstate commerce and international trade impacts for live animals. To defeat this pest, the USDA developed a five-prong plan to address NWS and enhance USDA's already robust ability to detect, control, and eliminate this pest if there is an incursion in the United States. APHIS launched the screwworm.gov website that represents a unified approach to centralize NWS information across the federal government and reflects a whole-of-government effort to fight this pest through implementation of USDA's comprehensive five-pronged plan.

NWS response goals will be to 1) detect, control, and contain NWS as quickly as possible; 2) eradicate NWS using strategies that seek to stabilize animal agriculture, the food supply, and the economy as well as protect public health and the environment; and 3) provide science- and risk-based approaches and systems to facilitate continuity of business of U.S. agriculture.

The primary use of the playbook is for responding to an NWS outbreak in the United States triggered by NWS establishment. NWS impacts all warm-blooded animals (humans, domestic animals and wildlife); the incorporation of these aspects are necessary for integration of successful response activities.

The primary response strategy for an NWS outbreak is 1) prevent contact between NWS flies and non-infested animals and 2) stop the production cycle and establishment of NWS flies. This is accomplished through prevention, detection, surveillance, administering NWS animal drugs or pesticide products in animals as is applicable, and establishing NWS response zones and areas. Prompt detection, appropriate use of NWS animal drugs and pesticide products for NWS infested animals and use of the sterile insect technique (SIT) can stop the production cycle of NWS flies.

INTRODUCTION TO THE PLAYBOOK

The playbook is meant to be a useful resource to help animal health officials and responders manage and adapt their response to NWS. The playbook is meant to be an easily referenced NWS response plan and a companion to the USDA APHIS NWS Response Strategy.

The critical NWS response activities include the following:

- Managing a coordinated response and communications with stakeholders and the public
- Reducing NWS infestation in animals and preventing it from establishing in new areas
- Monitoring and eliminating NWS through fly surveillance, animal surveillance/inspections, movement requirements, modified animal husbandry practices, NWS animal drugs and pesticide products, and the SIT
- Maintaining continuity of business
- Ensuring information flow and management
- Identifying and maintaining resource needs

These response activities are applied through all phases of an NWS outbreak: from first confirmation of NWS establishment in the United States, through implementation of mitigation activities to control the outbreak, to demonstration of NWS freedom in previously affected areas and in the United States. Integration of these response activities is critical for eradication. Each response activity can be adapted based on the outbreak situation, including different types of an outbreak (Table 1).

Table 1: Differentiating between Types of NWS Outbreaks[2]

NWS Outbreak Type	Response Activities
Type 1 - Focal Outbreak Localized to one infested zone within one state	Intense surveillance within NWS Zones and Areas[3], movement requirements for animals moving within and out of the Infested Zone. Initial activities are performed by state or federal personnel.
Type 2 - Moderate Sized or Regional Outbreak Spanning multiple counties or a large region of a state	Intense surveillance continues; start to utilize certified inspectors for inspection, administering NWS animal drugs and pesticides, and submitting samples. Sterile fly strategy may shift to focus on preventing outward spread and shrinking zones on leading edge.
Type 3 - Widespread or Multi-state Outbreak Outbreak spans an entire state, multiple states, or moderate sized outbreaks in multiple states	Same as Type 2 but resources become further constrained. Adapt the response to account for limitations in resources such as available personnel and total number of sterile flies.

The playbook must be adapted to the local context. All guidance should be developed in collaboration with Federal and State, Local, Territorial and Tribal (SLTT) officials using the One Health[4] approach to protect animal, human, and environmental health. States, Territories, and Tribes will need to adapt their response to meet the needs of their jurisdiction.

USDA APHIS Veterinary Services provides guidance, support, resources, and coordination during an NWS outbreak response. The approaches and tools included in the playbook reflect USDA APHIS guidance and aim to provide a practical framework to rapidly focus on priority activities outlined by USDA APHIS. Tools and resources will be updated regularly as new guidance on NWS is released by USDA APHIS.

This playbook is a living, dynamic document. Feedback and suggestions can be sent to FAD.PReP.Comments@usda.gov.

KEY PRINCIPLES FOR THE PLAYBOOK

Driven by data, science, and risk

Use data to inform decisions.

Protection of United States agriculture and related sectors

Ensure response activities do not negatively impact the commerce of United States agriculture, ensure a secure and safe food supply, and support animal health and welfare.

Communication and engagement

Maintain coordination and communication among States, Territories, and Tribes, and stakeholders.

Local adaptation

Adapt general response strategies to the regional and local context to maximize outbreak control efforts and minimize economic impacts.

[2] See NWS Phases and Types of an Outbreak.
[3] See NWS Overview of Zones and Areas.
[4] See APHIS One Health website.

Managing an NWS Response: Key Activities

01 Effectively manage a coordinated response and communications with stakeholders and the public

- Establish USDA regulatory authorities to respond to an NWS outbreak
- Use a unified approach across Federal Agencies and with the State(s)/Territory/Tribe(s) and define Federal Agency Roles
- Identify responsibilities between USDA APHIS and State/ Territory/Tribal animal health officials
- Communicate with key Federal, State, Territory, Tribal and Industry partners and the public to support timely surveillance and response

02 Reduce spread to non-infested animals and prevent NWS from establishing in new areas

- Immediately establish a minimum 20 km Infested Zone, 20 km Adjacent Surveillance Zones, and Fly Surveillance Area around animal and wild fly detections
- Quickly implement area quarantines and movement requirements for domestic animal on premises located within Infested Zones, on premises with a Suspect Case, and premises with epidemiological links to Confirmed Cases (epi-linked prem) outside of the IZ
- Perform trace investigations for animal movement from premises with infested animals as quickly and completely as possible; prioritize tracing needs based on risk of NWS establishment in new areas
- Conduct epidemiological investigations and analyses to inform the response
- Conduct domestic animal surveillance
- Quickly identify specimens and maintain timely and accurate animal surveillance

03 Manage NWS on infested premises

- Follow USDA APHIS and State guidelines and requirements for managing NWS myiasis and any required euthanasia and/or disposal

04 Implement NWS Surveillance and Management Strategies in Wildlife

- Establish and define State, Federal, Territorial and Tribal authorities with wildlife
- Conduct surveillance in wildlife to aid in determining presence of NWS
- Adhere to sampling guidance when conducting surveillance
- Manage transport and shipment of wildlife
- Manage infested wildlife

05 Implement NWS fly surveillance and management strategies

- Establish fly surveillance structure and activities in Infested Zone and Fly Surveillance Area
- Coordinate and conduct fly surveillance in an affected area
- Deploy Sterile Insect Technique (SIT) in response to an outbreak

06 Maintain continuity of business (COB)

- Implement COB plans to facilitate the managed movement of animals

07 Ensure information flow and management

- Record and report all NWS Fly Trapping and Sterile Fly Release Activities using USDA's Emergency Management Response System (EMRS)
- Record and report domestic and wildlife field data using EMRS
- Utilize EMRS to manage and track Active and Passive Surveillance Activities
- Utilize EMRS to manage the outbreak and meet national and international reporting requirements

08 Identify and maintain resource requirements

- Continually assess equipment, supplies, and personnel needs

Key Activities, Resources, and Tool

01 EFFECTIVELY MANAGE A COORDINATED RESPONSE AND COMMUNICATIONS WITH STAKEHOLDERS AND THE PUBLIC

1.1 Establish USDA regulatory authorities to respond to an NWS outbreak

Key Activities

- NWS myiasis is immediately reportable to USDA APHIS. If NWS becomes established in the United States, USDA is the lead federal agency of a coordinated response to control and eradicate NWS and ensure availability of resources. USDA coordinates and works within the authorities of other Federal/State domestic animal, wildlife and public health agencies to coordinate a response.
- USDA APHIS Veterinary Services (VS) emergency response authorities will be used to support NWS response activities. These authorities – in conjunction with other Federal, State, Territorial, and Tribal authorities – allow response activities to be conducted in affected areas.
- USDA may issue a Declaration of Extraordinary Emergency in the event of NWS establishment in the U.S. to ensure all federal government resources are available and coordinated for this emergency event.

RESOURCES AND TOOLS

- APHIS Foreign Animal Disease Framework: Roles and Coordination (FAD PReP Manual 1-0)
- USDA APHIS Authorization for Response Activities
- AHPA (7 U.S.C. 8301-8317)

1.2 Use a unified approach across Federal agencies and with the State(s)/Territory/Tribe(s), and define Federal agency roles

USDA Roles	Roles of Other Federal Partners/Resources
• USDA APHIS NWS Directorate: facilitates coordination across federal departments to ensure USDA APHIS activities are aligned with broader U.S. government response efforts. Leads USDA's strategic communication, interagency agreements, and policy alignment across the federal government. Serves as operational lead for NWS activities occurring in Mexico and Central America. Leads the coordination and implementation of aerial and ground sterile fly release activities. • APHIS VS: establishes a response structure per the National Incident Management System, coordinating across the federal government and with the State animal health official (SAHO) of the affected State(s) or Territory and, as needed, applicable tribal agency to enable efficient and effective incident management. Serves as the operational lead for domestic preparedness and response to NWS, including field operations, diagnostics, and surveillance. Provides subject matter experts, technical guidance, and operational planning input. • APHIS Wildlife Services (WS): serves as the lead for coordination with wildlife agencies and partners to determine wildlife response strategies and field operations utilizing respective agencies' authorities and available resources.	• Department of Health and Human Services (HHS) ▪ Centers for Disease Control and Prevention (CDC): leads human health surveillance and response, providing laboratory support including CDC confirmation of human infestations, educating healthcare providers, and coordinating One Health efforts across federal, state, local, territorial, tribal (SLTT), and international partners and engaging with health departments and other federal partners departments to raise awareness about the management and reporting of NWS. ▪ Food and Drug Administration (FDA): authorizes/approves the use of certain animal drugs to treat and/or prevent NWS infestations. • Department of the Interior (DOI): Broadly responsible for the management of natural resources on DOI-managed lands, including monitoring of wildlife populations on those lands and all species under federal protection or management authority independent of geographic location. Supports state agencies that have primary management responsibilities over resident wildlife populations on federal lands, consistent with applicable federal law. Co-leads the coordination of One Health efforts across federal, state, and tribal partners.

USDA Roles	Roles of Other Federal Partners/Resources
• APHIS Emergency and Regulatory Compliance Services (ERCS): serves as lead for incident safety and dispatch. • APHIS Plant Protection and Quarantine (PPQ): provides field resources and entomological expertise, such as support with additional fly trapping and NWS identification. • USDA Agricultural Research Service (ARS): provides entomological expertise, resources, and tools. Conducts NWS research. • USDA Food Safety and Inspection Service (FSIS): supports APHIS NWS surveillance efforts through inspection of animals presented for slaughter. • Coordination with other USDA agencies will occur as needed.	• Department of Energy (DoE): explores and validates new NWS sterilization technologies. • Department of Homeland Security (DHS): supports surveillance, intelligence sharing, emergency management, and emergency planning, including training Customs and Border Protection and Immigrations and Customs Enforcement personnel to identify and report suspected cases of NWS in either humans or CDC-regulated animals to CDC and USDA. • Environmental Protection Agency (EPA): registers pesticides and supports emergency exemptions for products to prevent or control infestations caused by NWS. • Additional Federal Agencies when needed.

1.3 Identify responsibilities between USDA APHIS and State/Territory/Tribal animal health officials

Key Activities

USDA APHIS Activities	State/Territory/Tribes Activities
• Coordinate public awareness and operational communications across Federal and SLTT organizations (e.g. forming a Joint Information Center (JIC)) • Coordinate the national incident response • Authorize, coordinate, and implement SIT operations and fly surveillance • Coordinate NWS identification in animals at APHIS' National Veterinary Services Laboratories (NVSL), through the National Animal Health Laboratory Network (NAHLN), and state entomologists • Deploy incident management teams (IMTs) and NWS strike teams, when requested • Coordinate the use of VS' Emergency Management and Response System (EMRS) for incident management • Provide access to the National Veterinary Stockpile (NVS) • Enter into emergency cooperative agreements with states, territories and tribes • Develop and conduct training for responders (state, federal, industry) to include field responder and outreach educator training coursework • Coordinate with CDC and state agriculture/public health partners in human and companion animal investigations	• Identify state agencies, territorial and tribal governments needed to implement response activities • Coordinate the state, territorial, and tribal incident response • Coordinate state public awareness campaign • Coordinate and provide security and safety of response personnel • Issue and enforce animal quarantines and movement requirements • Implement NWS zones and areas • Implement animal inspection stations, when needed • Deploy State IMT to implement domestic animal/wildlife response • Request USDA APHIS personnel (e.g., IMT/NWS strike team) and equipment/supply resources • Use EMRS, in addition to State or industry information technology systems, for reporting and incident management • Coordinate with USDA APHIS on fly trapping and SIT activities • Coordinate with APHIS VS for diagnostic sample collection, transport, and reporting between NVSL, NAHLN, and state entomologists • Enhance surveillance and case detection through outreach; coordinate surveillance in livestock, companion animals, and wildlife • Coordinate with CDC and state agriculture/public health partners in human and companion animal investigations

Companion Animals	
USDA APHIS Activities	**State/Territory/Tribes Activities**
• Provide guidance for companion animal surveillance and case investigations • Provide guidance for companion animal screening, quarantines, and use of NWS animal drugs and pesticide products in affected zones • Support veterinary diagnostics for companion animals suspected of NWS infestation • Issue outreach materials and guidance to veterinary practitioners and animal owners on recognizing and reporting signs of infestation • Integrate companion animal data into national surveillance and reporting systems to inform response planning	• Implement companion animal inspection, NWS animal drugs and pesticide products, and reporting protocols in coordination with USDA guidance • Engage local vets, shelters, and rescues to ensure rapid identification, reporting and management of NWS cases • Conduct public awareness campaigns targeting companion animal owners focusing on detection and reporting • Provide logistical support for companion animal management during epidemiologic investigation or movement restrictions • Coordinate with State Public Health Veterinarian or equivalent, CDC, and other partners to address public health needs

1.4 Communicate with key Federal, State, Territorial, Tribal and Industry partners and the public to support timely surveillance and response

Key Activities

- Coordinate public awareness campaigns and enhance public outreach and education through stakeholder notices, webinars, campaigns and other materials as needed.
- Coordinate with CBP and CDC to enhance public outreach and awareness of methods to prevent NWS introduction due to international travel or pet import.
- Promote awareness of response activities implemented and NWS status in animals and humans through public-facing dashboards and websites.

RESOURCES AND TOOLS

- Screwworm.gov
- USDA APHIS NWS Public Website
- USDA APHIS FAD PReP: New World Screwworm

02 REDUCE SPREAD TO NON-INFESTED ANIMALS AND PREVENT NWS FROM ESTABLISHING IN NEW AREAS

2.1 Immediately establish a minimum 20 km Infested Zone, 20 km Adjacent Surveillance Zone, and Fly Surveillance Area around animal and wild fly detections

Key Activities

Approach for NWS detections[5] in domestic animals, wildlife, or of the NWS wild (fertile) fly

- Immediately establish a minimum 20 km (~12.4 miles) Infested Zone (IZ) and a surrounding 20 km Adjacent Surveillance Zone (ASZ) around 1) premises with an infested domestic animal or 2) the location of infested wildlife, when NWS establishment is determined based on surveillance and/or epidemiological investigation, or 3) the location of NWS wild fly detections (Figure 1). This allows response activities to begin and be efficiently and effectively coordinated.
  - A minimum 20 km IZ is based on the daily distance NWS flies travel (1-2 km, 0.6 – 1.2 miles) and how long they fly in a lifetime (10-14 days). This initial zone sizing has also historically been used globally.
- Establish a Fly Surveillance Area (FSA) that overlaps and extends outward from the Infested and Adjacent Surveillance Zones.
  - The FSA should extend outward from NWS animal or fly detections to a distance up to 200 km (~124.3 miles) based on an assessment of factors that impact long-range travel of the fly (e.g., habitat suitability, geographic range, climate, weather, animal density, etc.).
  - The outside border of the FSA might not extend equally in all directions.

- Expand the IZ to encompass new NWS animal or fly detections when they are located within, or proximate to, an existing IZ/ASZ/FSA and considered part of the current area or region infested.
- Establish a new IZ when an NWS detection is 1) not located within an existing IZ/ASZ/FSA **and** 2) is located outside the NWS fly geographic range of the current area or region infested (e.g., long-distance movement of an infested animal originating from a previously established IZ) **and** 3) is not considered an NWS isolated case.

Approach for NWS isolated cases, or suspect cases not able to be sampled, that are located outside an established Infested Zone

- Quickly determine if an NWS case is isolated through epidemiological investigation. An NWS isolated case is an animal case that is located:
  - outside an established IZ where the infestation is contained to the initial finding, such as the case having a travel history outside the United States to a screwworm-infested country within the past 10 days, or
  - where NWS establishment in the area is not likely due to epidemiological factors, such as early detection or being in unsuitable NWS habitat, resulting in negligible risk of larval development.

RESOURCES AND TOOLS

- Establishing and Releasing NWS Zones and Areas
- USDA entomologists and analysts will determine Fly Surveillance Area sizing based on fly ecology and habitat assessment

[5] See NWS Case Definition.

- Identify NWS suspect cases not able to be sampled. This may include wildlife suspected to have NWS based on wildlife camera images or visual observations of wildlife with wounds, but the animals are not under human control to be sampled.
- For NWS isolated cases, conduct an epidemiological investigation and implement precautionary animal and fly surveillance through establishment of an Adjacent Surveillance Zone (ASZ) and Fly Surveillance Area (FSA), respectively, to demonstrate absence of NWS establishment.
- Immediately establish an Infested Zone (IZ) anytime NWS establishment is determined.
    - NWS establishment is determined based on detection of an NWS wild fly or evidence of locally acquired infestation. For example, no evidence of animal movement from an established IZ.
- Coordinate with CDC and state public health partners on human NWS cases to determine if animal or fly surveillance should be implemented to demonstrate presence or absence of NWS establishment.

RESOURCES AND TOOLS

- NWS Initial Epidemiological (Epi) Questionnaire
- USDA APHIS VS Center for Epidemiology and Animal Health

2.2 Quickly implement area quarantines and movement requirements for domestic animals on premises located within Infested Zones (IZ), on premises with a Suspect Case, and premises with epidemiological links to Confirmed Cases (epi-linked prem) outside of the IZ

Key Points

- Quarantines are emergency regulatory interventions to manage domestic animal movements and/or actions; the following authority applies:
    - State/Territorial/Tribal Authority and/or
    - USDA Authority: existing USDA authorities or USDA Extraordinary Emergency Declaration.
- Quarantines have specific managed movement requirements and actions (e.g., traceability, surveillance/animal inspections; see also Section 6) depending upon the Premises Status or location within an IZ.
- Appropriate Infested Zone (or other zone) designations may be required for implementation of quarantine, movement requirements, animal inspections, and administration of NWS animal drugs and pesticide products.

RESOURCES AND TOOLS

- NWS National Continuity of Business: Standardized Animal Movement Certificate Guidance
- NWS Case Definitions

Key Activities

- Impose State area quarantines and/or hold orders on domestic animal premises located within IZs to implement and enforce movement requirements, reporting of suspect cases, and implementing response activities.
- Impose State premises-level quarantines and/or hold orders on premises with infested domestic animals, and on premises with suspect cases and premises with animals that are epidemiologic links to confirmed cases, to manage and eliminate NWS infestations (see Section 3).
- Once the IZ is established, implement area quarantine and movement requirements, including pre-movement animal inspection and administration of NWS animal drugs and pesticide products when appropriate, based on standardized continuity of business NWS animal movement certificate guidance (see Section 6).

2.3 Perform trace investigations for animal movement from premises with infested animals as quickly and completely as possible; prioritize tracing needs based on risk of NWS establishment in new areas

Key Activities

- Utilize the NWS epidemiology questionnaire to determine if tracing animals, carcasses, visitors, or potentially infested material (e.g., manure) on or off infested premises is needed.

- Conduct tracing of animals, or potentially infested materials that moved on and off an infested premises prioritizing recent animal and carcass movements (14-day window prior to infestation). Animals already in-transit when NWS is detected at their premises of origin can proceed to their first destination to be inspected and treated there as appropriate.
- Coordinate tracing of human movement with public health partners.
- Leverage animal movement data to perform tracing as quickly as possible.
- When there is a high volume of animals to trace or resources are limited, prioritize tracing based on risk of NWS establishment in new areas:
    - Prioritize tracing animal and carcass movements off an infested premises.
    - Prioritize tracing animals, carcasses, and potentially infested materials that moved outside an established Infested Zone.

Companion Animals
• Support state animal health and public health authorities and relevant federal partners with investigating NWS cases in companion animals. • Coordinate with state authorities to implement temporary movement restrictions or quarantines as needed. • Engage veterinarians, shelters, rescues, and boarding facilities to report suspected cases of NWS infestation. • Deploy targeted outreach to shelters, boarding facilities, rescue groups, and veterinary clinics to enhance early detection and reporting. • Identify and evaluate movements of companion animals with confirmed or suspected NWS infestation to determine if the case is isolated, identify exposure sites and other at-risk populations, and inform surveillance and other response activities. • Support the American Veterinary Medical Association (AVMA) and other partners in the creation of treatment/prevention protocols for companion animals. • Integrate companion animal data into mapping and modeling efforts to inform surveillance priorities.

2.4 Conduct epidemiological investigations and analyses to inform the response

Key Activities

An epidemiologic investigation can identify cases, determine risk factors for infestation, determine the scale and scope of the outbreak, and support the development of mitigation strategies.

- Administer epidemiological questionnaires for all infested premises, including those with infested companion animals, and epi-linked premises (premises that are linked epidemiologically to infested premises).
    - Premises may have the questionnaire administered multiple times throughout the outbreak as the situation requires, such as if they are located within multiple zones, or if they become infested multiple times.
- Complete summaries and analyses using the epidemiological data collected to support internal/external reporting and communication with stakeholders, trade partners, and the public.
- Conduct an epidemiological investigation on premises adjacent to infested premises.
- Collect epidemiological information for movements into and out of the Infested Premises to identify epi-linked trace premises.
    - Epi-linked trace premises may include the entire premises, or smaller epidemiological units when appropriate.
- Prioritize investigations based on location (outside the Infested Zone (IZ) before premises within the IZ), risk, and other epidemiological factors.
- Inspect animals on epi-linked premises to assure freedom from NWS, being especially thorough with animals originating from the infested premises.

Companion Animals
• Include companion animals in outbreak case investigations to identify potential pathways or areas of infestation. • Collect detailed epidemiological data on companion animals associated with infestations. • Analyze companion animal cases to assess their role in maintaining or spreading NWS.

2.5 Conduct domestic animal surveillance

Key Activities

Passive Surveillance in the Infested Zone and Adjacent Surveillance Zone

- Perform extensive outreach and training in the IZ and ASZ, targeting animal owners, livestock workers, veterinary practitioners, and animal related businesses to increase vigilance and promote frequent inspection of animals for wounds and infestation, implementation of animal husbandry and welfare best practices, and reporting of suspect cases.
- Track outreach and training activities in EMRS (see Section 7).
- Continue enhanced passive surveillance for domestic animals until zones are released and the affected state is declared free.

RESOURCES AND TOOLS

- Best Practices for Evaluation of Animals for NWS
- Establishing and Releasing NWS Zones and Areas

Active Surveillance in the Infested Zone

Active surveillance of domestic animals will be accomplished through animal inspections prior to moving out of an IZ.

- Perform pre-movement inspections on farm-raised animals and captured/captive wild or feral animals under temporary or permanent human control that are located within an NWS IZ.
  - Meet requirements and obtain an animal movement certificate prior to animal movement out of an IZ for animals subject to NWS movement requirements, assuring inspection and documenting pre-movement use of NWS animal drugs and pesticide products when administered (see Section 6).
  - If myiasis is found during pre-movement inspection, place animals and the premises under quarantine until a Foreign Animal Disease (FAD) investigation and initial epidemiologic investigation can be completed (see Section 3). All suspect cases must be reported to the appropriate animal health authority (USDA VS, SAHO).
- Perform additional active surveillance activities in or around the IZ and ASZ as determined by the SAHO and APHIS VS. These may include:
  - regulatory inspection visits of premises,
  - movement control checkpoints for inspection of livestock shipments or companion animal movements,
  - Regular monitoring and inspecting of other outdoor animals on a premises with farm-raised animals, such as protection/guardian dogs,
  - regulatory inspections at slaughter establishments, and
  - investigating and monitoring companion animal and human cases in coordination with CDC and state public health partners.

RESOURCES AND TOOLS

- USDA APHIS VS Center for Epidemiology and Animal Health, Surveillance Design and Analysis
- USDA APHIS NWS Strategy Plan: Laboratory Diagnosis
- USDA APHIS NWS Strategy Plan: Surveillance
- USDA APHIS Fly Surveillance and Site Selection Methods
- NWS Pre-movement Animal Inspection Checklist
- NWS National Continuity of Business: Standardized Animal Movement Guidance

2.6 Quickly identify specimens and maintain timely and accurate animal surveillance

Key Activities

Coordinate NWS identification at NVSL and NAHLN, or other APHIS approved laboratories

- NWS identification of samples from animals will be performed at USDA APHIS approved NAHLN laboratories, by approved other laboratories/entomologists in a state, or at NVSL; all confirmatory identification/testing will be performed at NVSL.
- Coordinate with the USDA APHIS VS NAHLN Coordinator.
- Ensure NAHLN and NVSL testing requirements and sample submissions are coordinated and communicated between the IMT, NAHLN laboratories, NAHLN coordinator, and NVSL Director.
- Forward any presumptive NWS specimens, or specimens that resemble NWS to NVSL within 24 hours of laboratory receipt. Communicate with the APHIS VS/SAHO where the fly/larvae were collected; include assigned FAD investigation number in communication with NVSL, NAHLN and electronic results.
- Ensure electronic messaging of results following NWS specific guidelines; refer to the NAHLN Messaging Guidance.
- APHIS may approve other laboratories/entomologists outside of the NAHLN network to assist with identification. These laboratories outside of the NAHLN network will adhere to the same reporting requirements as outlined above for the NAHLN laboratories.
- Laboratory identification of samples from humans should be coordinated with state public health partners and CDC.

RESOURCES AND TOOLS

- USDA APHIS NWS Strategy Plan: Laboratory Diagnosis
- USDA APHIS NVSL
- National Animal Health Laboratory Network
- NAHLN Information Technology System
- NWS Case Definition
- Foreign Animal Disease Investigation Guide: NWS

03 MANAGE INFESTED ANIMALS AND PREMISES

Follow USDA APHIS and State guidelines and requirements for managing NWS myiasis and any necessary euthanasia and/or disposal

Key Activities

- Depopulation of groups of animals will not be used for general control and eradication of NWS. However, depopulation of a group of animals may be considered in select situations.
- Individual animals may need to be humanely euthanized in cases with severe myiasis or when treatment is not possible.

Implement guidelines for managing infested animals and premises

- Producers must report suspect cases immediately to the veterinary authority (USDA Area Veterinarian in Charge [AVIC], or SAHO) or their veterinarian. Veterinarians must report all cases to the AVIC or SAHO.
- Premises containing animals suspected of NWS myiasis must be placed on a hold order or quarantine while the case is under investigation. Domestic animals will be restricted from moving off the premises until they can be examined by regulatory personnel or other personnel approved by the SAHO.

RESOURCES AND TOOLS

- USDA APHIS Disease Response Strategy: NWS Myiasis
- AVMA Guidelines for the Euthanasia of Animals (2026)
- NWS Disposal and Disinfestation of Animals and Materials

- Perform physical inspection of domestic animals (including companion animals in a residential or urban setting) and use of NWS animal drugs and pesticide products following the Best Practices for Evaluation of Animals for NWS guidelines. Physical inspection and use of NWS animal drugs and pesticide products should be completed under the supervision of a regulatory official, licensed veterinarian, or other personnel approved by the SAHO.
- Authorized State or federal personnel will follow EMRS guidelines to track activities associated with the infested premises.
- Once examined and determined to be non-infested, animals may be moved off the premises if Infested Zone movement requirements are met.
- Conduct an epidemiologic survey and perform trace investigations outlined in Section 2. When relevant, coordinate with public health partners to address tracing of humans including visitors to premises.
- See Section 4 for managing wildlife on premises with infested animals.
- The quarantine may be released by the State once all wounds are healed and there is no evidence of reinfestation after 21 days, and owner has completed mitigation activities outlined in the Checklist for Management of Premises with Infested Animals. If the owner is unable to perform sufficient environmental mitigation activities, quarantine may be extended.
- After quarantine is released, all domestic animals on the premises will still be subject to movement requirements within the Infested Zone.

RESOURCES AND TOOLS

- NWS Checklist for Management of Premises with Infested Animals
- Best Practices for Evaluation of Animals for NWS
- NWS Disposal and Disinfestation of Animals and Materials

Implement guidelines for temporary animal aggregation points (such as markets and buying stations) with a detection of an infested animal

- If an infested animal is found at a temporary animal aggregation point, initiate an FAD Investigation. Follow documentation guidelines in EMRS NWS Tracking Toolkit.
- Any changes to the requirements listed in this section must be approved by APHIS and the SAHO.
- Dispose of carcasses and materials as outlined in the Disposal and Disinfestation of Animals and Materials guidance.
- If the aggregation point is within an established IZ:
  - Hold all animals in the same lot as the suspect animal.
  - Inspect all animals in the lot following the Best Practices for Evaluation of Animals for NWS guidelines.
  - Return infested animals to the premises of origin or hold and treat animals according to guidelines.
  - Additional pest mitigations may be required depending on where and how long the infested animals were housed on site prior to detection.
  - Conduct an epidemiologic survey and perform trace investigations outlined in Section 2.
  - Changes to these requirements must be approved by APHIS and the SAHO.
- If the aggregation point is outside of an IZ:
  - Hold animals at the facility until all animals can be inspected.
  - Inspect all animals on the premises following the Best Practices for Evaluation of Animals for NWS guidelines.
  - Return infested animals to the premises of origin or hold and treat animals according to guidelines.
  - Additional pest mitigations may be required depending on where and how long the infested animals were housed on site prior to detection.
  - Conduct an epidemiologic survey and perform trace investigations outlined in Section 2.

RESOURCES AND TOOLS

- Best Practices for Evaluation of Animals for NWS
- NWS Disposal and Disinfestation of Animals and Materials

Implement guidelines for a slaughter establishment with a detection of an infested animal

- NWS myiasis is not a food safety concern[6], and animals should be processed in accordance with FSIS or State regulations (whichever is applicable).
- Refer to FSIS Directive 6000.1 Responsibilities Related to Foreign Animal Diseases (FADs) and Reportable Conditions, which directs FSIS to contact the AVIC or SAHO to investigate all FADs suspected at slaughter facilities.
- Follow documentation guidelines in EMRS.
- Additional pest mitigations may be required depending on where and how long the infested animals were located on site prior to detection.
- Initiate a trace investigation to determine origin of an infested animal.

04 IMPLEMENT NWS SURVEILLANCE AND MANAGEMENT STRATEGIES IN WILDLIFE

4.1 Establish State, Federal, Territorial and Tribal authorities associated with wildlife

Key Points

- Wildlife in the United States are considered a public trust resource. As such, multiple government agencies may have authority over them, depending on the specific regulatory classification of the species.
- State, federal, territorial and tribal authorities each manage wildlife with distinct roles and responsibilities.
- States have the primary authority to manage wildlife, except for federal migratory bird species and federal threatened and endangered species within their respective borders, setting rules for hunting and other activities. This authority typically applies to non-federal lands, including state lands, other public lands and private lands.
- The federal government manages wildlife on some federal lands, such as national parks and wildlife refuges. However, the federal government frequently aligns its wildlife management with the state.
- The federal government has the primary authority for management of migratory bird species and federal threatened and endangered species.
- Tribal governments manage wildlife on their own tribal lands according to their tribal laws, goals and priorities.

RESOURCES AND TOOLS

- NWS sampling kits for wildlife professionals (*contact APHIS WS*)
- Foreign Animal Disease Investigation Guide: NWS

4.2 Conduct surveillance in wildlife to aid in determining presence of NWS

Key Points

- The primary objective of surveillance in wildlife for NWS is to aid in determining presence of NWS, especially in areas with low domestic animal densities, as well as supporting wildlife conservation, protection, and recovery of species at risk (including threatened and endangered species).
- Wildlife surveillance on the leading edge of the known Infested Zone (IZ) and throughout the Adjacent Surveillance Zone (ASZ) provides critical information for assessing the size of the zones.
- Surveillance will target captive, captured, and free-ranging wildlife.
- Combining active and passive surveillance strategies using State and Federal agencies, private organizations, and private citizens provides comprehensive surveillance of wildlife.
- Citizens and private organizations that regularly observe or interact with wildlife are important sources for passive surveillance.

[6] See FDA Drug Residues Guidelines; askFSIS Public Q&A on NWS.

- Surveillance within the IZ is important for releasing the zone and evaluating the success of eradication efforts, and post-eradication to ensure ongoing NWS myiasis is not present.
- Surveillance of wildlife within the Infested Zone can be used to identify sentinel species, support improvements in methodology, and evaluate optimal strategies to leverage for improved surveillance outside the IZ.

Key Activities

- Coordinate wildlife surveillance efforts with interagency partners (SLTT) and DOI to enhance detection, data sharing, and response readiness.
  - Work with SLTT partners and DOI field personnel to conduct coordinated wildlife surveillance, ensuring consistent sampling, timely reporting, and integration of findings into EMRS.
  - Leverage SLTT and DOI wildlife management activities (trapping, field investigations, population monitoring) to expand surveillance coverage and improve early detection of NWS.
- Start active wildlife surveillance after establishment of an Infested Zone (IZ) and Adjacent Surveillance Zone (ASZ).
  - Focus on high use areas (water, food, shelter and the travel corridors to each).
  - Include active surveillance streams such as hunter check stations, inspection of any wildlife being transported for any purpose, recently road killed animals, Agency (State or Federal) surveillance of wildlife contacted during routine activities (e.g. damage management, wildlife research, etc.), FAD investigations, camera traps placed by federal or state authorities, and targeted removal of individual wildlife exhibiting signs of NWS myiasis. See the wildlife surveillance guidance document for more details.
  - Consider expanding active surveillance in wildlife outside the ASZ as the outbreak expands, or risks change. Wildlife with large home ranges (e.g., mountain lions) with documented NWS myiasis, should warrant consideration of a larger surveillance area.
  - Consider focusing on specific species that have been identified as good sentinel species.
- Incorporate passive surveillance streams
  - Provide outreach and education to key groups in the IZ, ASZ and Fly Surveillance Area (FSA). Examples of key groups are private citizens and private organizations such as hunters, wildlife control specialists, wildlife rehabilitators, taxidermists, extension agents, researchers, and other private citizens and organizations that are routinely contacting or viewing wildlife.
  - Encourage these groups to report any sightings of potential NWS cases.
- Once an outbreak is resolved, surveillance in wildlife will remain ongoing to monitor cases of NWS and support releasing an IZ and demonstrating areas are NWS-free.

RESOURCES AND TOOLS

- NWS Overview of Wildlife Surveillance
- AI programs such as CameraTrapDetector or SpeciesNet to aid in identification of animal species.

4.3 Adhere to sampling guidance when conducting surveillance

Key Activities

- Follow collection guidelines when collecting larvae from wildlife with suspected myiasis.
- Coordinate sample collection from wildlife with SLTT and DOI to ensure alignment with ongoing management operations and necessary wildlife handling permits and access agreements.
- Coordinate sample submission with APHIS AVIC, IMT, or SAHOs to ensure timely and accurate reporting

4.4 Manage transport and shipment of wildlife

Key Activities

Captive Wildlife	Captured Wildlife	Wildlife Carcasses[7]
• Shipment/transport of captive wildlife (i.e. zoo animals, farmed wildlife or other wildlife under human control) must adhere to regulations and policies pertaining to domestic animals outlined in Section 2.5.	• Consider discontinuing capture and transport of wildlife (e.g. feral swine, deer, etc.) by the public from the IZ and ASZ. • If public capture and transport of wildlife is allowed, animals should adhere to regulations and policies pertaining to domestic animals outlined in Section 2.5 and Section 6. Animals from wildlife rehabilitators or nuisance animal control companies in the IZ must be inspected and found free of NWS before movement. Consult State and federal wildlife officials on guidance or if animals should be administered NWS animal drugs or pesticide products should be utilized.	• All wildlife carcasses being transported out of the Infested Zone (IZ) or Adjacent Surveillance Zone (ASZ) should be inspected for NWS to prevent the unintentional spread of larvae. When feasible, establish hunter check stations within the zones for harvested wildlife during hunting seasons. • Consider prohibiting the transport of whole carcasses out of both the IZ and ASZ. • Deboned meat, processed meat, antlers with cleaned skull plates are considered low to negligible risk. • Infested or suspect wildlife carcasses completely enclosed in a sealed bag may be acceptable for movement when transport to an approved disposal facility is needed.

4.5 Manage infested wildlife

Key Points

- Wildlife reported as having myiasis are likely to have advanced infestations with the presence of third instars (mature larval stage of the screwworm fly) by the time the animal's infestation is severe enough to be noticed and reported.
- Management of wildlife carcasses that may contain screwworm larvae is important. Second and third instar larvae can successfully pupate after leaving a carcass and can contribute to ongoing infestations. This was thought to contribute significantly to previous infestations involving wildlife as noted during the 2016 Florida NWS outbreak in key deer.
- Use of NWS animal drugs or pesticide products may be considered in wildlife under some circumstances and will vary depending on regulatory approvals, objectives and triggers for use, species affected and goals of administering these products. NWS animal drugs and pesticide products in wildlife should only be used following use directions and regulations, and after careful evaluation to ensure delivery methods are both effective and adequate to achieve population-level impact.
- Active reduction of free-ranging wildlife populations could be considered under very limited circumstances.
- Use and delivery of NWS animal drugs and pesticide products should receive special consideration for non-target species impact and unintended environmental consequence of use. Any use of products would need to comply with local and state regulations.
- Disposal of infested carcasses should comply with local and state regulations.

[7] Refer to NWS Disposal and Disinfestation of Animals and Materials.

Key Activities

Disposal

- When possible, carcasses infested with NWS should be left in place and risks mitigated on-site to avoid unintentionally moving larvae to a new premises/area.
- If movement of an infested carcass is required, it should be inspected and, if possible, treated and placed in a sealed bag before being transported to an approved disposal site. See disposal guidelines document for more details.
- Disposal should be conducted in accordance with local laws and regulations and as directed by the appropriate authority.

RESOURCES AND TOOLS

- USDA APHIS Carcass Management Resources
- NWS Disposal and Disinfestation of Animals and Materials

Treatment

Consider these three categories of wildlife when deciding on when to apply NWS animal drugs or pesticide products:

1. *Common, free ranging wildlife* (e.g. deer, wild pigs, peri-domestic species, etc.): The primary objective is to reduce myiasis in an already affected population until sterile fly releases are possible.
2. *Federal or state listed species of concern, threatened, or endangered wildlife*: Careful consideration of actions and management to treat and/or prevent myiasis in these species should be taken to reduce mortality of affected animals. Use of NWS animal drugs or pesticide products in these wildlife species should be done in consultation with U.S. Fish and Wildlife Service and wildlife agencies. Specific NWS animal drugs or pesticide products selected for use would depend on the environment, presence of non-target species, and the target species.
3. *Endangered wildlife*: NWS animal drugs or pesticide products may be considered for administration in endangered wildlife populations to prevent and/or treat myiasis. Use of NWS animal drugs or pesticide products in endangered wildlife should be done in consultation with U.S. Fish and Wildlife Service and the state wildlife agency. Specific NWS animal drugs or pesticide products selected for use would depend on the environment, presence of non-target species, and the target species.
4. *Captive wildlife* and wildlife under human care: Captive wildlife and wildlife under human care will be easier to treat since they are more likely to be physically handled. These might include animals in zoological or wildlife exhibits, wildlife at rehabilitators, wildlife captured for research purposes, or hunting preserves/facilities. Animals in these environments may be considered for administration of NWS animal drugs or pesticide products to prevent and/or treat animals affected by NWS. Specific NWS animal drugs and pesticide products as well as method of delivery will depend on the environment (e.g., open-air exhibit, presence of wetlands, etc.), presence of non-target species, and the target species. NWS animal drug or pesticide product use in captive wildlife and wildlife under human care should be done in consultation with USDA and appropriate wildlife agencies.

RESOURCES AND TOOLS

- NWS Overview of Wildlife Surveillance
- NWS Considerations for Use of Antiparasitic Drugs and Pesticides in Free Ranging Wildlife

Active reduction of free-ranging wildlife populations

- If a particular free-ranging wildlife species is identified as having a high prevalence of myiasis and is unprotected or requested by the state or federal land management agencies for removal, then "local" population reduction may be considered. An example of this might be the increased removal of feral swine in and around the IZ. These activities should be conducted in coordination and consultation with appropriate State, Federal, Territorial, or Tribal wildlife agencies.
- Wildlife host population reduction should be considered only as an additional tool to aid in reducing available hosts when evidence exists that the wildlife species has higher than expected levels of myiasis and population reduction will aid in reducing infestations.

RESOURCES AND TOOLS

- Trained APHIS WS staff would be able to assist with population reduction when authorized and requested

- Wildlife host population reduction should not be used as a primary tool to control infestations and should only be implemented in consultation with State, Territory, Tribal and Federal partners in unprotected wildlife species and removal activities should only be conducted by wildlife agency personnel or in consultation with APHIS-WS.

05 IMPLEMENT NWS FLY SURVEILLANCE AND MANAGEMENT STRATEGIES

Key Points

- APHIS will authorize, implement, and coordinate fly trapping and sterile fly release operations, including production, release (ground and aerial), and surveillance, in cooperation with federal and state authorities.
- Surveillance for NWS flies is used to determine the geographic spread of flies, document the absence of fertile NWS flies (through their absence in traps) in Infested Zones (IZ) and Adjacent and Fly surveillance zone/area (ASZ and FSA), and to provide evidence of freedom from NWS after sterile fly release is discontinued.
- When sterile insect release is used in coordination with State and Federal authorities by ground, vehicle, or aerial methods, trapping will be used within the response areas to evaluate the release, dispersal, and efficacy of sterile NWS flies.

5.1 Establish fly surveillance structure and activities in the Infested Zone and Fly Surveillance Area

Key Activities

- Set and monitor fly traps throughout the IZ and Fly Surveillance Area (FSA) (refer to Section 2) to determine the geographic range of flies, document the presence and absence of wild NWS flies, inform the release, dispersal, and efficacy of sterile NWS flies, and provide evidence of freedom from NWS.
- Establish a new IZ and ASZ for any detection of a wild fly in a fly trap in a new area outside of established zones.
- Results from these activities can be used to inform additional mitigation activities including enhanced on-farm surveillance, wildlife surveillance or the establishment of additional IZ and ASZ or the release of areas from IZ and ASZ.
- Follow standard handling and biosecurity protocols during trap collection and transport to maintain sample integrity and reduce risk of spread.
- Closure of zones and halting surveillance activities will be determined by incorporating fly, domestic animal, and wildlife surveillance information.
- Coordinate with SLTT and federal partners to align fly surveillance networks with existing vector control, land management, and jurisdictional authorities to maximize coverage and minimize duplication of effort.

RESOURCES AND TOOLS

- NWS Response: Fly Surveillance & Site Selection Methods

5.2 Coordinate and conduct fly surveillance in an affected area

Key Activities

- Integrate surveillance data from all activities for analysis, visualization, and timely communication to response agencies and stakeholders.

RESOURCES AND TOOLS

- USDA APHIS NWS Strategy Plan: NWS Eradication using the Sterile Insect Technique/Surveillance
- NWS Response: Fly Surveillance & Site Selection Methods

- Collect NWS flies using available methods include luring/baiting flies and catching them with nets or trapping with wind-oriented sticky traps with chemical attractants or other traps.
- Set up traps at varying distances from points of known infestation and account for typical flight distance of NWS flies, preferred habitats, host density/presence, and weather patterns.
- Conduct trapping and surveillance activities in favorable NWS habitats (e.g., edges of wooded areas), and in such a manner that the trapping/surveillance site is located up-wind, so the odor of the attractant carries into the favorable habitat.
- Sort trapped flies at pre-determined labs or designated submission areas.
- Conduct ongoing training for field personnel (strike teams) to integrate into IMT surveillance teams.
- Establish mobile field response trailers to support strike teams with resources for trap deployment and SIT and fly identification.
- Ship suspect and presumptive NWS life stages to NVSL for final confirmation.
- Correlate fly surveillance results with concurrent domestic animal and wildlife surveillance data to refine risk assessments and guide control measures.
- Ensure surveillance results and presumptive detections are reported through chains of command in real time.
- Work with SLTT and federal partners to prioritize high-risk locations, facilitate site access, and share real-time data to strengthen surveillance in affected areas.

Companion Animals
• Analyze epidemiological data for companion animal infestations to evaluate their potential role in maintaining or spreading NWS. • Coordinate fly surveillance around companion animal cases (as determined by epi evaluation) with SLTT partners.

5.3 Deploy Sterile Insect Technique (SIT) in Response to an Outbreak

Key Activities

- Mitigate and reduce spread of fertile flies using SIT.
- USDA will coordinate ground, air, and truck sterile fly release. Refer to SIT Factsheet for additional details for possible methods to release sterile NWS into the environment.
- USDA will consider deploying SIT in two situations:
  1. finding NWS larvae in an animal or person that did not travel outside of the United States in the previous 10 days; or
  2. finding NWS larvae in an animal or person that did travel outside of the United States in the previous 10 days, with evidence that larvae may have left the host in the United States (e.g., myiasis detected 5 or more days after United States arrival, or collection of NWS pupae) and could complete pupation (e.g., access to soil, favorable local temperatures, suitable seasonal climate).
- Collaborate with SLTT and federal partners to support SIT implementation through coordinated release sites, monitoring, and evaluation of effectiveness.

RESOURCES AND TOOLS

- APHIS NWS SIT Factsheet
- NWS Response: Fly Surveillance & Surveillance Site Methods

06 MAINTAIN CONTINUITY OF BUSINESS (COB)

Key Points

- NWS myiasis is not a food safety concern; there are no movement requirements for animal products.
- While NWS is a significant threat to all warm-blooded domestic animals, the risk is often greater for farm-raised and wild/feral animals due to outdoor exposure, production or management practices that increase susceptibility to infestation in open wounds, and potential for large-scale economic impact. As such, movement requirements to maintain COB apply to animals located within an NWS Infested Zone (IZ) that are farm-raised or are captured/captive wild or feral animals under permanent or temporary human control.
- Specific to wildlife, COB relating to hunting seasons and outdoor recreation is important.
- Protocols for pre-movement administration of animal drugs or pesticide products for NWS prevention or treatment of different species/animal production types or for different animal movement scenarios are in development to support their sustainable use for NWS and other parasites.
- Owners of animals located within an NWS IZ and not subject to the below movement requirements, such as companion animals, should contact the destination SAHO office for interstate animal movement requirements.

6.1 Implement COB plans to facilitate the managed movement of animals

Key Activities

- Domestic animals or captive/captured wild animals not located in an IZ and not identified as Epi-Linked or Suspect Premises, may move in normal channels of intra/interstate commerce, unless otherwise restricted due to a regional quarantine with associated movement requirements.
- There are no movement requirements for animal movements into an IZ.
- Domestic animals or captive/captured wild animals subject to movement requirements that are located in an IZ or are Epi-Linked or Suspect Premises require an NWS animal movement certificate for animal movement out of the zone: the NWS animal movement certificate is attached to an interstate Certificate of Veterinary Inspection (iCVI), or other form approved by the SAHOs, and submitted to the origin and destination SAHO for interstate movements; otherwise, the NWS animal movement certificate is submitted to the origin SAHO for intrastate movements.
- Implement the NWS National Continuity of Business: Standardized Animal Movement Guidance for inspecting animals and administering NWS animal drugs or pesticide products, when applicable, before moving them out of an IZ; contact the SAHO office where animals originate for process of submitting animal movement certificates for approval and for any additional requirements.
- Use SAHO state systems for obtaining animal movement certificates for interstate and intrastate movement of domestic and captive/captured wild animals out of an Infested Zone.

RESOURCES AND TOOLS

- NWS National Continuity of Business: Standardized Animal Movement Guidance
- USDA APHIS NWS Strategy Plan: Quarantine and Movement Control

07 ENSURE INFORMATION FLOW AND MANAGEMENT

7.1 Record and report NWS Fly Trapping and Sterile Fly Release Activities using USDA's Emergency Management Response System (EMRS)

Key Activities

- Manage and track all fly surveillance activities utilizing EMRS, the system of record for all foreign animal disease investigations and incidents.
- Manage and track all Sterile Fly Release activities (aerial and ground release) in EMRS.
- Develop NWS map products with data pipelines from EMRS into geodatabases.
- Utilize map tools, such as operational dashboards, StoryMaps, or custom interactive maps for situational awareness or communication with stakeholders, and industry. Products will be based on needs identified by internal and external stakeholders.

RESOURCES AND TOOLS

- USDA APHIS EMRS
- USDA APHIS NWS Fly Assessment Form

7.2 Record and report domestic animal and wildlife field data using EMRS

Key Activities

- Authorized users will load and collect all domestic and wildlife data into EMRS. Utilize data for outbreak management and data visualization/analysis.
- Document and record any wildlife inspected for evidence of NWS in EMRS and the APHIS WS Operation and Reporting System (OARS). All suspect and confirmed animal cases will be tracked in EMRS.
- Develop NWS outbreak map products (including any products needed to support trade) utilizing data from EMRS. Products will be based on needs identified by internal and external stakeholders.

7.3 Utilize EMRS to manage and track active and passive animal and fly surveillance activities

Key Activities

- Track and manage passive surveillance activities in established zones using EMRS.
- Develop EMRS products and procedures as surveillance protocols and policies are established.
- Utilize EMRS as the APHIS VS primary system of record for outbreak management with potential supplementation via third party state or industry systems.

7.4 Utilize EMRS to manage the outbreak and meet national and international reporting requirements

Key Activities

- Develop internal and external situational reports using USDA APHIS and State/Territory/Tribal templates and data within EMRS; USDA APHIS will coordinate with affected State and Territory officials on public reporting of the outbreak situation.
- Use of EMRS will be critical for negotiating and reestablishing trade.

RESOURCES AND TOOLS

- World Organisation for Animal Health Terrestrial Animal Health Code: New World Screwworm
- USDA APHIS NWS Strategy Plan: Information Management

- APHIS will submit an immediate notification (IN) to the World Organisation for Animal Health (WOAH) following the first confirmation of NWS in the United States in an animal. Following the initial immediate notification to WOAH, APHIS will submit weekly follow-up reports to WOAH including all confirmed detections in domestic and wild species. Positive premises statuses and positive subject statuses as recorded in EMRS will be used to provide data for WOAH immediate notifications and follow-up reports. Detections in WOAH reports will be identified at the County level. *WOAH does not provide specific criteria for proof of freedom from NWS.*
- Develop NWS map products for national and international reporting needs (as needed and identified).

08 IDENTIFY AND MAINTAIN RESOURCE REQUIREMENTS

8.1 Continually assess equipment, supplies and personnel needs

Key Points

- All resource needs will be identified, evaluated and monitored by the AVIC/SAHO of the affected State or the IMT.
- Submit resource requests through EMRS.
- Discuss and identify locally available and necessary resources among various agency partners.
- Distribute traps and attractants in accordance with APHIS NWS SMEs risk-based approach for surveillance.
- Sterile insect procurement, quantities, release sites and method of dispersal will be determined by NWS SMEs and USDA leadership based on case location, risk of spread to new geographical areas.
- The National Veterinary Stockpile (NVS) augments SLTT response by providing resources, upon request, when local and state resources have been exhausted and in cases where only USDA is able to procure the equipment/supplies.

Primary Equipment / Supplies	Primary Personnel Needs	Resources / Tools
National Veterinary Stockpile (NVS) • NWS collection kit items • Fly trapping/surveillance equipment/supplies • Products to prevent and/or treat NWS infestation • Disposable supplies (including syringes, needles, etc.) • NWS response trailer supplies • Cold chain equipment/supplies to transport sterile flies for ground and/or air dispersal • Coordination of sterile insect release to the designated sites will be through the NVS and NWS SMEs with local response team **NVS Coordinated Supplies and Equipment** • Fly trapping/surveillance equipment/supplies • Sterile fly release equipment/supplies • ¾ ton or larger truck for hauling (response trailers, refrigerated trailers, some animal handling equipment)	• NWS Strike Team Leader • NWS Strike Team Member • Sterile Insect Lab Technician • SIT Program Team member • Training Coordinator • NWS Case Manager • Contract Officer's Representative • Interdiction Team Member • Law Enforcement Officer	• USDA APHIS EMRS • USDA APHIS National Veterinary Stockpile • NWS Checklist for Management of Premises with Infested Animals • FDA - Animal Drugs for NWS • Pesticides for Control of New World Screwworm • NWS Disposal and Disinfestation of Animals and Materials • FAD Investigation Guide for NWS • VS Guidance 12001.5 Ready Reference Guide

Primary Equipment / Supplies	Primary Personnel Needs	Resources / Tools
Local Purchases / Contracts • Safety items such as bug spray and sunscreen • Fly trapping equipment/supplies • Equipment/supplies for building sterile fly ground release chamber **Local IMT Logistics** • Identify location where NWS attractants can be mixed safely	• Wildlife Biologists • Outreach Team member • IMT Positions • NWS SME • NWS Field Responder • NWS Surveillance Technician	

Criteria for Releasing an Infested Zone and Demonstrating the Area is Free from NWS[8]

Demonstrating an Infested Zone is free of NWS infestation will be based on surveillance that includes trapping of flies, assessment of sterile fly dispersal, and visual inspection of animals for myiasis. Depending on specific weather and seasonal conditions in the area(s) of infestation, surveillance should be carried out in an Infested Zone for 3-4 NWS life cycles past the last NWS detection before the zone is released. Suitable habitat and environmental and climatic factors impact the timeline of the NWS life cycle, and therefore, the timeline for releasing an Infested Zone. In temperate climates, it is generally at least 3 months (~24 days/life cycle) past the last NWS detection during an outbreak that an Infested Zone can be released; this timeline may be shorter or longer in different locations within the United States.

Additional surveillance for international and bilateral trading partners may be necessary both prior to and after the release of the Infested Zone. The extent, frequency, and type of additional surveillance required will depend on many factors, such as (but not limited to) the density of domestic animals and wildlife in the region, species, epidemiological information, environmental and climatic information, and commodity exported. The objective of this surveillance is to provide evidence of the absence of NWS to satisfy international and bilateral trading partners. Active and passive surveillance schemes may be used.

[8] Refer to NWS Overview of Zones and Areas.

General Resources

Screwworm.gov

USDA APHIS NWS FAD PReP

USDA APHIS EMRS

USDA APHIS NVSL

USDA APHIS VS Center for Epidemiology and Animal Health, Surveillance Design and Analysis

USDA APHIS Carcass Management Resources

APHIS NWS SIT Factsheet

National Animal Health Laboratory Network

FDA Animal Drugs for NWS

FDA Drug Residues Guidelines

EPA Pesticides for Control of New World Screwworm

CDC New World Screwworm

CDC Stop New World Screwworm: Agriculture producers

CDC Stop New World Screwworm: Agriculture employees

FSIS Directive 6000.1 Responsibilities Related to Foreign Animal Diseases (FADs) and Reportable Conditions

AVMA Guidelines for the Euthanasia of Animals (2026)

FEMA National Incident Management System

DHS National Response Framework

DHS Food and Agriculture Incident Annex

NWS Response Playbook Supplemental Materials

Disease Response Strategy New World Screwworm Myiasis (Green book)

Foreign Animal Disease Investigation Guide: NWS

USDA APHIS Case Definition: New World and Old World Screwworm Myiasis

NWS National Continuity of Business: Standardized Animal Movement Guidance

Ready Reference Guide – Establishing and Releasing NWS Zones and Areas

NWS Fly Assessment Form

NWS Fly Surveillance and Site Selection Methods

VS Guidance 12001.5 Ready Reference Guide

NWS Checklist for Management of Premises with Infested Animals

NWS Disposal and Disinfestation of Animals and Materials

NWS Overview of Wildlife Active Surveillance

NWS Considerations for Use of Antiparasitic Drugs and Pesticides in Free Ranging Wildlife

NWS Initial Epidemiological (Epi) Questionnaire

NWS Pre-movement Animal Inspection Checklist

Best Practices for Evaluation of Animals for NWS

Additional Resources

APHIS Foreign Animal Disease Framework: Roles and Coordination (FAD PReP Manual 1-0)

APHIS Foreign Animal Disease Framework: Response Strategies (FAD PReP Manual 2-0)

APHIS Foreign Animal Disease Framework: Information Management and Reporting (FAD PReP Manual 3-0)

APHIS FAD Investigation Manual (FAD PReP Manual 4-0)

NAHEMS: Continuity of Business

NAHEMS: Disposal

NAHEMS: Health and Safety

NAHEMS: Personal Protective Equipment

NAHEMS: Wildlife Management & Vector Control for FAD Response

The FAD PReP mission is to raise awareness, define expectations, and improve capabilities for FAD preparedness and response.
For more information, please go to www.aphis.usda.gov/animal-emergencies/fadprep.

Definitions

Active surveillance: any proactive surveillance, such as direct inspection of animals or NWS fly trapping, that is conducted to determine if an animal has any evidence of myiasis or evidence of the NWS sterile or wild fly.

Adjacent Surveillance Zone (ASZ): Zone that immediately surrounds an Infested Zone. The perimeter should be between 21 to 40 km (~13.1 to 24.9 miles) beyond the Infested Zone.

Animal Health Authority/Authorities: National, regional, state, or local government organizations with regulatory authority for safeguarding animal (including wildlife) health.

Captive wildlife: animals maintained in captivity for exhibition (including zoos), sale, personal use, education, propagation, preservation, protection or hunting purposes with no expectation of returning to, or allowing to move freely in, the wild.

Captured wildlife: free-ranging wildlife that are under temporary human control with the intent to be returned to and move freely in the wild.

Domestic animals: mammals and birds including:

- Livestock, Production, and Farm-Raised Animals: includes cattle, swine, sheep, goats, poultry, equids, farmed cervid breeding herds.
- Captured or captive wild and feral animals: includes feral Sus scrofa, horses, burros, etc.
- Companion Animals: includes animals considered as pets or for companionship, such as dogs, cats and rabbits, or feral companion animals held in captivity. All equids (e.g., horses) are considered farm-raised animals and subject to movement requirements.

Epidemiologically-linked (epi-linked) premises: premises that are linked epidemiologically to infested premises/infested animals through tracing movement of animals, carcasses and/or materials onto and off of the infested premises. Examples include premises that sent animals to the infested premises or that received animals from the infested premises prior to detection.

Farm-Raised animals: Animals raised or maintained in captivity for the production of meat, fiber, fur or other agricultural products, for sport, for exhibition breeding, hunting, or for recreation. This includes but is not limited to cattle, swine, sheep, goats, poultry, equine, and farmed cervids breeding herds.

Feral animals: animals of species originally domesticated by humans that have escaped, been released, or otherwise reverted to a self-sustaining existence in the wild. Examples include but are not limited to Sus scrofa, feral horses/burros, feral goats, etc.

Fly Surveillance Area (FSA): Area that is between 0 to 200 km (~124.3 miles) from the Infested Premises, location of infested wildlife, or NWS wild fly detections. The FSA overlaps the Infested and Adjacent Surveillance Zones. The actual size and border of the FSA will be based on an assessment of suitable habitat and the geographic range of flies for the area.

Infested Premises (IP): Premises where there is at least one presumptive positive case or NVSL confirmed positive case of an animal infested with the larvae of NWS.

Infested Zone (IZ): Zone that is at least 20 km (~12.4 miles) beyond the perimeter of an Infested Premises, location of infested wildlife, or location of NWS wild fly detections.

Invasive species: an alien species whose introduction does or is likely to cause economic or environmental harm or harm to human health. This also includes non-native species that, when introduced, can disrupt local ecosystems and pose risks to human health and the environment.

Movement requirements: refers to animal movement requirements based on criteria to support continuity of business during an NWS outbreak. For NWS, this is accomplished through issuance of animal movement certifications with inspection ± NWS animal drug and/or pesticide product use requirements before moving animals out of an NWS Infested Zone to mitigate the spread of NWS to new premises/new areas.

NWS infestation: detection of the NWS fly in an area/premises. NWS myiasis, the parasitic infestation of living flesh by these larvae (maggots), results from that infestation.

NWS myiasis: occurs when NWS female flies are attracted to warm-blooded animals and lay eggs at the edges of wounds or on mucous membranes like nostrils, ears, eye orbits, mouth, or genitalia. Within 10 to 12 hours, larvae (commonly known as maggots) emerge from the eggs and immediately begin to feed. As they feed on host fluids and underlying tissues, the damage caused by their hook-like mouthparts enlarges and deepens the wound. The odor, serum, and blood emitted by the infested wound can attract other female flies that also lay their eggs.

NWS certified inspector: veterinarian, veterinary technician, or other identified individuals authorized by the SAHO who have been trained on myiasis clinical identification and animal inspection through the NWS Certified Inspector Program.

NWS detection: see NWS Case Definition: www.aphis.usda.gov/sites/default/files/nws-ows-case-definition.pdf

NWS establishment: a self-sustaining and reproducing NWS population that is present and active in an area. Includes introduction of the pest into the United States that has progressed from an isolated, contained case to a reproducing NWS population as demonstrated through surveillance and/or epidemiological investigation. NWS establishment indicates an NWS outbreak. An NWS isolated case with no detection or indication of a self-sustaining, reproducing NWS wild fly population does not meet the definition of NWS establishment.

NWS isolated case: a domestic animal or wildlife case where the confirmed infestation is contained to the initial finding and does not indicate a wider, self-sustaining NWS pest population in the area. Key characteristics of an isolated case include travel-associated cases and early case detection and use of NWS animal drugs or pesticides to prevent larval development in the area as demonstrated through surveillance. The case must have a history of movement from an NWS Infested Zone or country recognized as affected with NWS to be designated as an NWS isolated case.

NWS outbreak: establishment of a self-sustaining, reproducing population of the NWS wild fly.

One Health: One Health is a collaborative, multisectoral, and transdisciplinary approach — working at the local, regional, national, and global levels — with the goal of achieving optimal health outcomes recognizing the interconnection between people, animals, plants, and their shared environment. (U.S. Government Definition, established 2017)

Passive surveillance: includes any monitoring or reporting, typically by the public, of animals suspected of having myiasis.

Premises Identification Number (PIN, Prem ID): a nationally unique number assigned by a State, Territory, Tribal, and/or Federal animal health authority to a premises that is a geographically distinct location from other premises. The PIN may be used in conjunction with a producer's own livestock production numbering system to provide a nationally unique and herd-unique identification number for an animal. It may be used as a component of a group/lot identification number (9 CFR: Chapter 1, Subchapter C, Part 86).

Quarantine: refers to imposing requirements, such as movement requirements, on animals on a premises or in an area or region where NWS exists or is suspected.

State animal health official (SAHO; usaha.org/saho): The lead animal health official for a state. The key point of contact and primary USDA APHIS partner on all animal disease-related matters within the state.

Sentinel species: a free-living wild animal species that serves as an early warning indicator of the presence of NWS.

Sterile Insect Technique (SIT): a mitigation activity to reduce the number of fertile flies within and around an NWS Infested Zone and contain spread if it is determined that a population of NWS is present, or may be in the process of developing, within the United States. SIT is considered an environmentally friendly pest control method because it is species-specific and leaves no chemical residues.

Suspect Premises (SP): A premises with animals suspected, but not confirmed to be infested with NWS, or a premises with an epidemiological link (e.g. animal movement) to an Infested Premises. This is intended to be a short-term premises designation in EMRS.

Temporary animal aggregation point: premises or locations where animals are temporarily brought together for a short period of time for a specific purpose, such as for sale, transport, or health inspection. Examples include livestock markets, saleyards, auctions, buying stations, exhibitions, fairs, and competition events.

Warm-blooded animals (Endotherms): All mammals, including humans, and birds are warm-blooded. All warm-blooded animals can become infested with NWS.

Wildlife: Any free-ranging animal living in a natural environment whose management is under the jurisdiction of state, territorial or tribal wildlife agencies or federal agencies.

Wildlife Agency: refers to federal, state, territorial, or tribal wildlife agencies legally responsible for the management of free-ranging wildlife, and in some cases captive wildlife.

Wildlife health point of contact: The wildlife health point of contact for a wildlife agency. The key point of contact and partner to USDA APHIS and other federal agencies on wildlife disease-related matters within the federal, state, territorial, and tribal boundaries.