

New World Screwworm in the United States

Key Takeaways

- There is strong concern New World Screwworm (NWS) will spread into the United States and begin affecting the American cattle herd.
- In 2022, NWS reemerged in Panama and has been slowly making its way north since. In recent months, the NWS has spread north of its endemic habitat into Mexico, and cattle are their most common host.
- Since November 2024, there have been over 1,400 detections of NWS in Mexico. In early May of 2025, NWS was detected 127 miles outside the secondary threshold of Oaxaca and Vera Cruz, Mexico (less than 500 miles from the U.S./Mexico border).
- With the break in the secondary threshold, there is no longer enough sterile fly production capacity to keep NWS from moving further north.
- In May, efforts began to urge the United States Department of Agriculture (USDA) to build a sterile fly facility in the U.S.
- Secretary Brooke Rollins announced a five-step outline on how they plan to address the NWS threat.

Questions

1. If NWS crosses the border into the United States, how would a stop movement order affect your livestock operation?
2. Is Secretary Rollins's five-step response plan enough to address a NWS outbreak?
3. What other measures are needed to eradicate the NWS?

Background

The New World Screwworm (NWS) is a fly endemic to Cuba, Haiti, the Dominican Republic, and other South American countries. The NWS lays eggs on warm-blooded animals – livestock, poultry, wildlife, domestic animals, and even humans – typically around a fresh wound. When the eggs hatch, the NWS larvae feed on the surrounding flesh as they burrow into the wound. If left untreated, animals infested with NWS can die of trauma, toxicity, or other infections within two weeks.

In 2000, NWS was eradicated to Panama by using the Sterile Insect Technique, or the mass release of sterile male flies into specific areas. This prevents the spread of NWS when sterile male flies mate with wild females who produce unfertilized eggs. Since female NWS flies only mate once, the population rapidly shrinks and is ultimately eradicated. While the use of sterile flies is the only way to eradicate NWS, there are options for treatment once NWS is detected. First, screwworm infestations must be reported to state and federal authorities. Treatment

then involves killing and removing the larvae from the infested wound. Both Nitenpyram and Ivermectin are successful treatments for treating NWS infestations, as well as using anti-parasitics like lindane or ronnel.

In 2022, NWS reemerged in Panama and has been slowly making its way north since. In recent months, the NWS has spread north of its endemic habitat into Mexico, and cattle are their most common host. There is strong concern NWS will spread into the United States and begin affecting the American cattle herd. Should NWS enter the U.S., it is very likely the federal government would implement a series of stop movement orders on cattle and other livestock. To protect the U.S. from this threat, the U.S-Mexico border was closed to cattle, bison, and horses from Mexico on May 11, 2025, and again on July 9, 2025.

When NWS was discovered in the Mexican state of Chiapas in November 2024, primary and secondary thresholds were established as breaking points for fly control. The Panama production facility had enough capacity (about 100 million flies per week) to release sterile flies inside the buffer zone between the primary and secondary threshold and push them back to the biological barrier in Panama.

Currently, there is only one facility in the world to produce sterile flies located in Panama. Since November 2024, there have been over 1,400 detections of NWS in Mexico. In early May of 2025, NWS was detected 127 miles outside the secondary threshold of Oaxaca and Vera Cruz, Mexico (less than 500 miles from the U.S./Mexico border), leading to U.S. Agriculture Secretary Brooke Rollins’s announcement to suspend live animal imports from Mexico. With the break in the secondary threshold, there is no longer enough sterile fly production capacity to keep NWS from moving further north.



Figure 1: New World Screwworm Moves Beyond Containment Threshold; Market Intel; American Farm Bureau Federation

USDA's Economic Research Service (ERS) conducted an impact analysis using historical data to estimate the impacts of a screwworm outbreak in Texas. Texas is home to 12.5 million head of cattle, or about 14% of the U.S. herd. The study included costs incurred from the isolated 1976 outbreak, adjusted them for inflation, and applied them to today's cattle inventory in Texas. According to this study, the annual economic cost is estimated to be \$1.9 billion.

On the farm level, the presence of NWS adds a considerable amount of cost to day-to-day operations, with death of infected cattle the single greatest expense. Loss of growth, medical bills, and other treatment expenses also impact a farmer's bottom line.

In May, efforts began to urge the United States Department of Agriculture (USDA) to build a sterile fly facility in the U.S. The Strengthening Tactics to Obstruct the Population of Screwworms (STOP Screwworms) Act would authorize funds for and direct USDA to construct a NWS sterile fly facility in the United States to combat the NWS outbreak. In conjunction, a group of 76 members of Congress sent a letter to Secretary Rollins urging USDA to act swiftly to construct a domestic sterile fly facility.

In response, Secretary Rollins announced a five-step outline on how they plan to address the NWS threat. Scan the QR code for a full outline of the plan.

Highlights include:

- Stop NWS from spreading in Mexico
 - Work closely with Mexico to improve its surveillance and detection by providing traps, lures, and technical assistance to Mexico
- Protect the U.S. border at all costs
 - Ensure regular reporting with Mexico as an early warning intervention
 - Escalate communications and public outreach along the border to raise awareness
 - Utilize the already existing fever tick framework and apply it to NWS
- Maximize readiness

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Read the full outline of Secretary Rollins's plan:



- Work with state animal health officials to finalize emergency management plans
- Ensure sufficient NWS treatments and work to remove federal regulatory hurdles to those treatments (i.e., pesticides)
- Take the fight to NWS
 - Immediately begin construction on a sterile fly facility at Moore Air Base in Texas to dispense flies into both the U.S. and Mexico
- Innovate the way to eradication
 - Research new and efficient ways to improve sterile fly technology
 - Utilize land-grant universities along border states for various efforts such as surveillance, stakeholder outreach, and training and trap development

Policy

Tennessee Farm Bureau Veterinary Services (Partial)

The state veterinarian should have all needed authority to act in events of emerging and/or foreign animal diseases and should have timely access and adequate resources to address emergency disease outbreaks. Flexibility and faster response times to emerging diseases is critical to the safety and well-being of the livestock industry.

We further encourage Congress to ensure adequate funding for the Animal Disease Center and Veterinary Services Laboratory. Research and programs for disease control are critical in maintaining a protected, healthy livestock industry; thus, assuring a safe, abundant food supply.

Animal Welfare (Partial)

Livestock producers continually strive to keep their animals healthy through robust biosecurity, vaccination, and treatment programs. We support the advancement of properly researched and industry-tested animal health technologies to enable farmers to improve the care and management of their livestock and combat emerging diseases.

American Farm Bureau

302 / Animal Health Emergency Management Preparedness (Partial)

1. Animal disease has a negative impact on food safety and the nation's livestock industry, which is fundamental to international trade.
2. Adequate USDA animal health facilities are critical to maintaining our world-class research on both foreign and domestic diseases. The United States should use every means necessary to ensure that these diseases do not reach U.S. soil.

4. We recommend additional research for developing diagnostics and vaccines, (including mRNA, novel and emerging vaccine development) to understand the biology of organisms and determining why diseases emerge. We and the international community must give priority to other emerging infectious diseases such as African Swine Fever, foot-and-mouth disease (FMD), Exotic Newcastle Disease, West Nile Virus, vesicular stomatitis, bovine spongiform encephalopathy (BSE), classic swine fever, porcine epidemic diarrhea virus, pseudorabies, tuberculosis, salmonella, E. coli, scrapies, avian influenza, and contagious equine metritis.

6. We support:
 - 6.3. The development and continued support of a coordinated animal disease surveillance control and eradication program to prevent the introduction of foreign or emerging animal diseases, poultry disease or pests into this country and to control and eradicate those that exist;

 - 6.6. Cooperative efforts, between government and industry, at the international, national, state, and local levels in crafting this management system, such as the National Animal Health Emergency Management system. Components of this system include prevention, preparedness, response and recovery;

 - 6.13. Increased surveillance and preparedness for foreign animal diseases, including increased biosecurity inspections at all points of entry and increased funding for additional security;

307 / Livestock and Poultry Health (Partial)

10. We support:
 - 10.21. APHIS carefully evaluating international restrictions on animals and especially on products to assure that such restrictions are science-based;

 - 10.29. Compartmentalization and secure food plans to protect movement and exports in livestock and poultry industries during disease incidents;

 - 10.32. Funding for additional U.S. Customs and Border Protection and USDA APHIS inspectors to prevent the importation of animal and plant diseases;

15. Cattle

- 15.1.5. (We support:) Research and eventual eradication of the screw worm.