New World Screwworm Domestic Readiness and Response Policy Initiative

Background

The U.S. has defeated NWS before and can successfully do it again.

- New World screwworm (NWS) is a devastating pest. When NWS fly larvae (maggots) burrow into the flesh of a living animal, they cause serious, often deadly damage to the animal. NWS can infest livestock, pets, wildlife, occasionally birds, and in rare cases, people. This is a serious concern to the U.S. economy and the U.S. food supply and the United States Department of Agriculture (USDA) is committed to combatting the spread of NWS to protect American agriculture.
- USDA eradicated NWS from the U.S. in the 1960s, USDA and its partners contained it to South America using sterile insect technology; however, NWS began spreading northward and was detected in southern Mexico in November 2024.
- Mexico has not yet detected NWS in areas located immediately near the U.S. border, but this could change at any time and put Texas, New Mexico, and Arizona at risk.
- An effective eradication strategy centers on three main pillars:
    1) effective controls on the movement of animals;
    2) strong surveillance systems and public outreach; and
    3) the use of proven sterile insect technology and exploration of additional innovative strategies to defeat the pest.
- To achieve success, USDA will work across the federal, state, and local government partners, and with the public and the private sectors to take the following actions as part of its 5-Prong Strategy:

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1) *Stop the Pest from Spreading in Mexico*

- **Enhance international sterile fly production** with USDA's recent $21 million spend in Mexico's production capabilities and renovation of an existing fruit fly production facility in Metapa, Mexico. At full operation, this will provide an additional 60-100 million sterile flies on top of the 100 million flies per week produced at the Panama-United States Commission for the Eradication and Prevention of Screwworm (COPEG) facility in Panama. *The estimated time to completion is 18 months.*
- **Continue building collaborating with Mexico** to contain NWS within its borders – from ongoing daily technical conversations to regular conversations program leaders have with their counterparts in Mexico and throughout the region.
- **Break down administrative or regulatory roadblocks**. With an inaugural in-person meeting the week of May 20 in Washington, DC and follow-up work in Mexico, APHIS and Mexico are establishing and building upon technical working groups to discuss surveillance and overcome obstacles that impair an effective response.
- **Improve Mexico's surveillance** so we know where NWS is and has been and ensure they are reporting as close to real time as possible. APHIS is working closely with Mexico to establish the appropriate surveillance and reporting mechanisms and traveling to Mexico to verify.
- **Provide Mexico with NWS traps and lures**, and the technical expertise they need to build, deploy, and maintain them effectively and consistently in at-risk areas.
- **Collect comprehensive data** from Mexico about checkpoint surveillance, detections, inspections and other information that will give us a real-time look at the outbreak in Mexico, allowing us to update our strategies quickly.
- **Renew and update existing animal health technical agreements** with Mexico and ensure these plans are updated for the current NWS situation.
- **Conduct a robust audit** of Mexico's animal health controls. USDA personnel will visit Mexico in person on an as needed basis to observe and support Mexico's surveillance and eradication efforts to ensure alignment and transparency in the shared goal of NWS eradication.
- **Limit the movement of animals**, collaborating with Mexico and other partners to determine where we can quickly stop movements and stop the halt the spread.

2) *Protect the U.S. Border at All Costs*

- **Oversee Mexico's strategic trapping** on the southern border as an early warning intervention by ensuring they have the tools and knowledge to conduct this important work and report findings to us.
- **Escalate communications and public outreach** along the U.S.-Mexico border to create a "barrier zone of vigilance" while boosting awareness of this pest among key audiences across the country. This will include fact sheets targeted to specific audiences, such as hunters; webinars; partnered communications with states, universities, and NGOs; and innovative strategies to ensure this important message gets to farmers, ranchers, and the general public.
- **Gather stray and intercept illegally introduced livestock** on the border with Mexico in collaboration with U.S. Customs & Border Protection and USDA Cattle Fever Tick Eradication Program personnel already in the field.
- **Collaborate with state wildlife agencies** to identify priority areas for wild/feral animal surveillance and passive wildlife monitoring.
- **Ensure the National Veterinary Services Laboratories are ready** to test for this pest by conducting training pursuing development of additional testing capabilities.
- **Continue enhanced inspection of live animals** at ports of entry from Mexico if/when ports are re-opened and regularly reassess the need for these intensive inspections or import requirements.

3) *Maximize Our Readiness*

- **Partner with state animal health officials** to update and finalize emergency management plans.
- **Ensure awareness of USDA's existing response plans and guidelines** among State animal health officials and other partners for the Federal response to a foreign animal disease.
- **Continue training federal and state responders** on how to respond to an outbreak, if one occurs in the United States.
- **Remove any regulatory hurdles** by working with EPA, FDA and others to ensure access to effective wound and treatment products that fall under their jurisdiction.
- **Ensure we have sufficient treatments**, and while we do not anticipate shortages of therapeutics, prepare to stockpile to backstop any needs while commercial developments accelerate.
- **Identify personnel needs** for emergency response and put preparations in place for deployment of existing employees and hiring of additional personnel.

- **If a domestic detection occurs**, USDA will act swiftly to implement a domestic response by immediately notifying state and local partners, evaluating animal movement in the area, isolating the incident, deploying STI resources, and initiating surveillance in the surrounding area.

4) *Take the Fight to the Screwworm*

- **Sterile screwworm flies are one of the most important tools** we have for eradicating NWS. We will need more sterile insects than we currently produce to eradicate it.
- **Immediately begin building** an $8.5 million sterile insect dispersal facility at Moore Air Base in South Texas, which will be completed by the end of 2025. This facility will help protect the U.S. by allowing us to disperse sterile flies at our border and Northern Mexico. The estimated time to completion is six months.
- **USDA is exploring all options to eradicate NWS**, which includes potential expenditures in new technologies, new science, including possible plans to move forward with the design process of a domestic sterile fly production facility to compliment the new dispersal facility at Moore Air Base, which has also been identified as the proposed location. The facility could boost domestic sterile fly production by up to 300 million flies per week and could compliment current production that already exists in Panama and Mexico.
- **Support Mexico's renovation** of its own sterile insect facility with USDA's recent $21 million spend, which will add between 60-100 million additional sterile flies to our efforts. *The estimated time to completion is 18 months.*
- **Continue to rapidly explore and seek to validate modular rearing facilities and other technologies** that may provide quicker construction and surge capacity in the future.

5) *Innovate Our Way to Continued Success*

- **Leverage the sound science including USDA's Agriculture Research Service** (ARS) to continue to quickly develop novel treatments, preventatives, and response strategies.
- **Pursue innovative research** into improving sterile insect technology in the future. This could include exploring the use of additional or modified strains of the pest or genetically engineered organisms.
- **Explore the development of better traps and lures** so that we have a better understanding of where the pest is and has been.
- **Assess the potential use and practicality of e-beam and other radiation technology for the production of sterile flies**. E-beam or other sterilization may offer the future potential to decentralize production facilities and allow for quicker modular expansion.
- **Continue meaningful partnerships with states**, especially those along the border through our detailed partnership plans.

- **Strengthen partnerships with land-grant universities** in Texas, Arizona, and New Mexico. These partnerships can facilitate local training, trap deployment, surveillance validation, and stakeholder outreach.
- **Explore next generation treatments** for the screwworm with our partners to help producers deal with the effects should it enter the country.