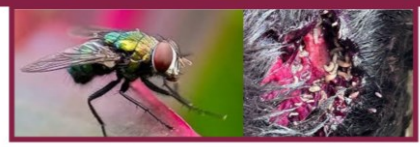
College of Agricultural, Consumer and Environmental Sciences

New World Screwworm



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The College of Agricultural, Consumer and Environmental Sciences is an engine for economic and community development in New Mexico, improving the lives of New Mexicans through academic, research, and Extension programs.

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New World Screwworm Outbreak in Central America and Mexico

Last Modified: June 09, 2025

In 2023, NWS detections in Panama exploded from an average of 25 cases per year to more than 6,500 cases in 1 year. Since then, screwworm has been detected in Costa Rica, Nicaragua, Honduras, Guatemala, Belize, El Salvador, and Mexico, north of the biological barrier that's successfully contained this pest to South America for decades.

Secretary Rollins Suspends Live Animal Imports Through Ports of Entry Along Southern Border, Effective Immediately

On May 11, 2025, U.S. Secretary of Agriculture Brooke L. Rollins announced the suspension of live cattle, horse, and bison imports through U.S. ports of entry along the southern border due to the continued and rapid northward spread of New World Screwworm (NWS) in Mexico, effective immediately.

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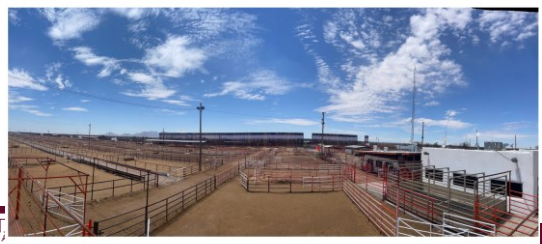
Santa Teresa cattle border crossing reopening scrapped after screwworm movement in Mexico

BY: **DANIELLE PROKOP** - JULY 18, 2025 2:54 PM



Empty corrals at the Santa Teresa International livestock crossing. The incursion of parasitic fly into Mexico has interrupted livestock border trade for the last several months and is poised to

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What is New World Screwworm(NWS)?

- Fly whose larvae feed on live flesh.
- Fly can lay up to 3000 eggs in a life cycle.
- Eggs are implanted in open wounds or orifices.
- The larvae are what cause significant damage and create health issues for the host animal.

Figure 1. New World Screwworm Fly

Figure 2. Common House Fly

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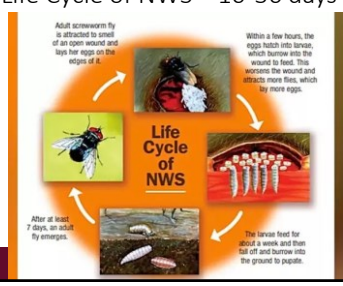
Life Cycle of NWS = 10-30 days



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Where We Are Now

- February 2023 – Panama reported an increase in cases
- July 2023 – Panama, Costa Rica
- March 2024 – Nicaragua
- September 2024 – Honduras
- October 2024 – Guatemala
- November 2024 – Mexico
- December 2024 – El Salvador and Belize
- July 2025 – Oaxaca/Veracruz
  - 350 miles from TX border

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Status Update on Mexico

- First diagnosed case in Mexico on November 21, 2024
- As of mid-July, there were approx. 3000 cases (approx. 300-350 active cases/wk) in 7 states.
- Majority of cases are in cattle; smaller number of cases reported in horses, pigs, dogs, sheep/goats.
- Most infestations are found in the navel or secondary to trauma, dehorning, or tagging

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A Pest Not Currently Found in NM or the US

- Reportable to NMLB, USDA, NMDOH
- Economic significance
- Will affect interstate travel/commerce
- Will affect international trade

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NWS Infestation
See something – Say something

Detection of NWS

- Smell of decaying flesh
- Wounds that enlarge and won't heal
- Infestation is painful
- Secondary infection

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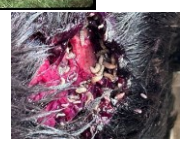
Surveillance is Key

- Open wounds that show no signs of healing.
- Wounds are infested with maggots
- Animal becomes listless and reluctant to move, eat, or drink.



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What to do if you suspect NWS

- Isolate affected animal.
- Take photo's of affected wound (with larvae present)
- Contact your veterinarian.
- Contact the New Mexico Department of Agriculture Veterinary Health Services (505-383-9299)
- Contact your local extension agent
- Send samples to NMDA for analysis.

Reporting form can be found using QR code:

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Sample Collection

- Collect various sizes of larvae from different parts of wound
- Make sure to collect from deepest parts of wound
- Place larvae into 70% alcohol in a liquid-proof container.

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Wound Care:

1. Wear latex gloves and protective clothing while caring for the animal.
2. After taking the sample of maggots remove ALL the maggots
3. Spray wound with antiseptic/wound healing spray.
4. Apply iodine.
5. Give injectable dectomax dewormer at the appropriate dose.
6. Check the surrounding ground for any maggots that may have fallen off the animal.
7. Keep animal in a clean environment away from other livestock.

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Prevention of NWS

- Establish a good deworming program.
  - Injectable most effective.
  - Read labels for dosage and withdrawal.
- Surveillance is key
  - Watch for animals with open wounds that do not seem to be healing.
  - Animals act lethargic and appear to not be eating well.

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Prevention of NWS

- "Feed Through" deworming products
  - In development
  - Not recommended as consumption/dose cannot be controlled.

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Prevention of NWS – Animals in confinement

- ✓Implement a consistent fly control program.
  - ✓Permethrin products are effective
- ✓Keep pens clean of manure.
- ✓Keep weeds clear from the pens

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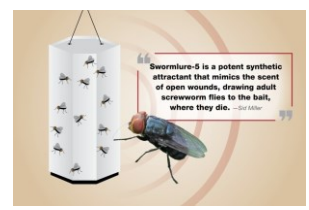
Species specific bait trap in experimental phase – TX Dept of Ag.



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Plan of Action

1. USDA disease monitoring in Mexico
2. Distribution of sterile male NWS flies in affected regions
3. Keep live animal imports from Mexico ceased until further notice.
4. Producer education

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NWS – Sterile Insect Technique

- Female NWS flies only mate once in their lifetime
- NWS pupae can be irradiated to make them sterile
- Sterile males mate with wild females and cause her to lay infertile eggs
- Over time, this results in decreased population and helps with eradication

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About Us

About COPEG

A multidisciplinary group of professionals in subject of prevention of Screwworm (SW) works to massively produce SW flies and release them in the field, while ground epidemiological surveillance is carried out to guarantee the maintenance of the Permanent Prevention Biological Barrier

OUR STATISTICS

18	96,008,156 M	8
Aerial Dispersal (Until September 28th)	Pupae per Week (Until September 28th)	Honduras cases (Until September 28th)
3,307	6,938	18,553
Nicaragua cases (Until September 28th)	Costa Rica cases (Until September 28th)	Panama cases (Until September 28th)

Commission for the Eradication and Prevention of Screwworm (COPEG)

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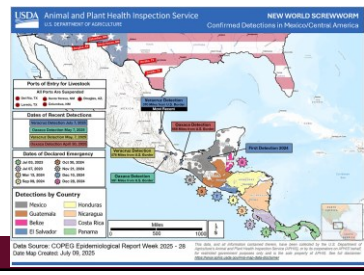
Unfortunately.. Its not a matter of if



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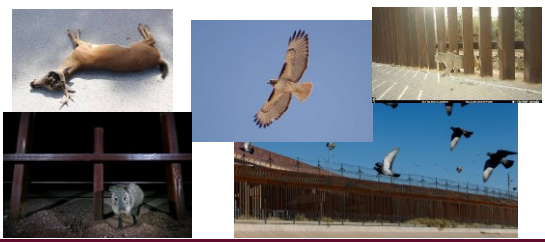
Wildlife pose the biggest threat



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What happens if NWS or any other regulated disease is found in your animals?

- Veterinarians are bound by law to report confirmed reportable disease to the state's department of health / livestock board.
- Depending on the disease, the state veterinarian has the authority to stopping movement of animals from the affected premise until further notice.
  - A quarantine may be implemented; with length dependent on disease.
    - Example: Trich + herd, cows pregnant less than 120 days or open cows must remain on the premise for 120 days.
    - Example: NWS quarantine will be dependent on monitoring and length determined by state and federal officials.
- Failing to report suspected FAD could lead to legal persecution.

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What happens if NWS or any other regulated disease is found in your animals?

Be prepared:

- ✓Do you have enough space to keep animals for extended periods of time?
- ✓If a pasture has been established as a "hot zone" is there enough forage and water to sustain the animals for extended periods of time?
- ✓What feed resources do you have access to?
- ✓Do you have a list of resources (tribal agencies, extension, etc) that can help provide assistance in case of an emergency.
  - ✓Would be similar to wildfire response.

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Economic impact of FAD

- Trade disruptions
- Market volatility
- Increased operating costs
  - Treatment
  - Feed
  - Disease monitoring
- Animal losses
- Loss in animal performance
- Consumer confidence

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Economic impact of NWS

- The screwworm outbreak in the US in the 50's and 60's cost the animal ag industry an estimated 60-120 million annually.
- In 2024 alone, it is estimated that Mexico has lost over $1.2 billion in cattle revenue.
  - That is expected to almost double due to the loss of the export business to the US.

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In Summary

- Surveillance is key.
- Recording dates symptoms start is critical.
- Develop a good relationship with a veterinarian.
- Maintain good nutrition and health management practices to minimize sickness.
- Protect yourself and your animals with a good biosecurity plan.
  - Keep new animals away from core herd for at least 2 weeks.
  - Keep feed, supplies, equipment clean of contaminants.
  - Establish a good fly and parasite control program.
  - Be familiar with visitors and mindful of public access points.

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Other resources

https://www.youtube.com/watch?v=vCPO3YxZIOA

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A.P.P.

- ✓ Aware
- ✓ Prepare
- ✓ Prevent

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THANK YOU!
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