

New World Screwworm

In June of 2026, the first New World Screwworm (NWS) was detected in the United States, found in a 3-week-old calf in Texas. This detection comes after a year of close monitoring across the border in Mexico as well as the release of sterile flies to mitigate the harsh impact of this pest.

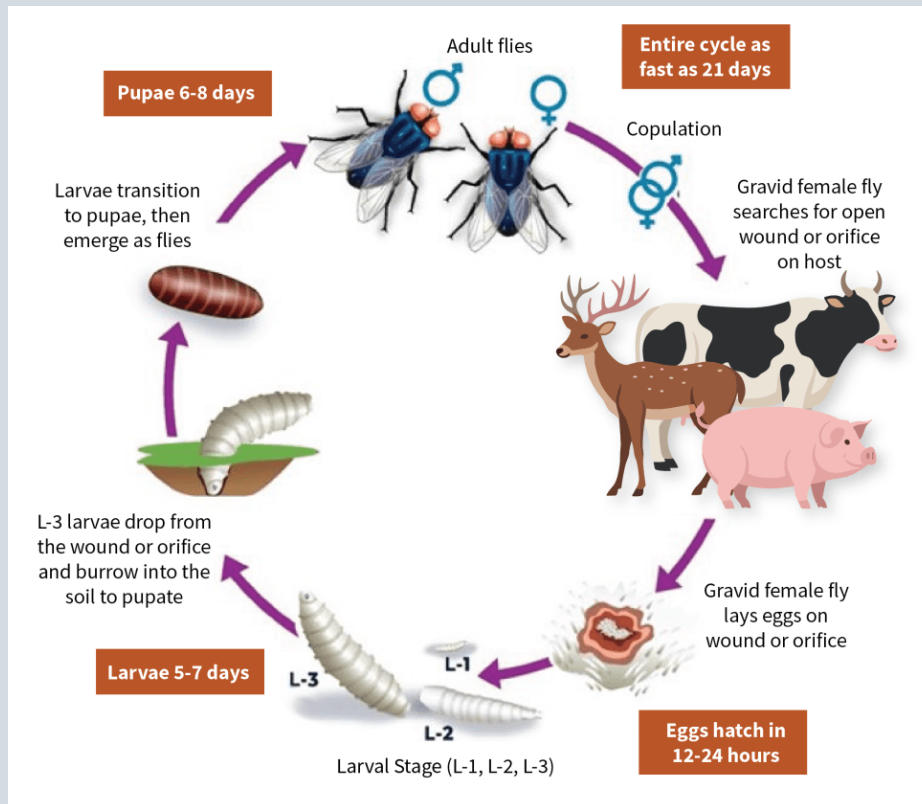
NWS is a pest that may cause extensive damage to livestock. NWS flies lay their eggs in wounds or

calves. The larvae then burrow (like a screw) into the living flesh, typically causing serious and potentially deadly damage. Adult Screwworm flies are about the size of a common housefly with orange eyes and a metallic blue or green body with three dark stripes along their back and can look very similar to flies found here in Nebraska. NWS is most common in livestock, pets, wildlife and occasionally birds, but is rarely found in people.



New World screwworm flies are about the size of a common housefly, with orange eyes, a metallic blue or green body, & three dark stripes along its back.

New World Screwworm Life Cycle



The entire life cycle of NWS can be as fast as 21 days. After the female fly is fertilized, she searches for open wounds or orifices on a host, then lays her eggs on the wound or orifice. After 12-24 hours, the eggs hatch and the larvae take 5-7 days to grow, during this time they tear into the flesh of their host, feeding until they are fully developed. When they are ready, the larvae drop from the host and bury themselves in the ground to pupate. This is where they will transition into pupae for 6-8 days before emerging as an adult fly and starting the cycle over again.

NWS has been found in the United States since 1842 and previously posed a serious threat. In 1957 USDA started an eradication program after the development of the sterile insect technique in the 1940's. NWS was originally eradicated in 1966. This technique was also used in 2016 in a small outbreak that occurred in Florida, eradicating it by March of 2017. The sterile insect technique involves releasing sterile male flies into the affected region. These males will then mate with females, which only mate one time, who will lay unfertilized eggs that do not hatch. As the flies die off there are none to replace them and eventually the species die off altogether in that region. The benefits of this technique include not using chemical pesticides and it poses no risk to humans, livestock or pets and only affects the targeted species.

USDA is currently working diligently to keep this pest at bay. Part of their long-term response involves several different investments. One of the most recent being \$25 million put towards the opening of a new sterile fly dispersal facility in Arizona. Additional investments include modifications to the Metapa, Mexico fruit fly facility to produce sterile NWS male flies, as well as the construction of another sterile fly production facility at Moore Airbase in Edinburg, Texas.

While New World Screwworm is a significant concern to the US and the livestock industry, NWS has historically not established itself this far north. Nebraska has the advantage of winter weather that will kill the fly. The adult fly will decrease activity when temperatures fall below 70 degrees Fahrenheit, and the pupae will die in the soil before transforming into a fly when the temperature drops below 42 degrees Fahrenheit.



New World screwworm pupae.

Prevention begins with Inspection, Protection and Treatment.

It's important to inspect livestock regularly. Producers should look for these signs and symptoms in their livestock: irritated behavior, head shaking, the smell of decay and the presence of fly larvae (maggots) in wounds. Protect open skin: untreated navels, tail docking, castration, shearing or other wounds, foot or reproductive lesions, etc. You can learn more about these risk areas at screwworm.gov. Finally, treating wounds properly when they occur is a critical step to avoiding screwworm infestation. Schedule procedures during low fly seasons or avoid, if possible, to prevent new wounds/openings for screwworm flies to lay eggs. If you see any concerning signs, contact your herd veterinarian who can decide if the case should be reported to NDA.



Closeup of New World screwworm fly & egg mass on a wound.

For Nebraska producers, it's important to remain vigilant about the NWS situation and where the fly is within the country. The best source for NWS information in Nebraska is the NDA NWS website: <https://nda.nebraska.gov/animal/diseases/nws> or USDA's website screwworm.gov. These websites will provide links to other pages including the Texas Animal Health Commission website where you can see where infested zones are located. To receive a current status of the confirmed New World screwworm animal and wild fly detections in the United States, go to the [USDA's APHIS website](https://aphis.usda.gov). If you receive livestock from infested states or travel with animals to infested states, you should monitor the animals closely for 2-3 weeks after return looking for wounds on your animals. Additionally, work with your herd veterinarian to discuss best practices and preemptive plans especially if you are getting animals from infested states or traveling with animals to infested states. You can also reach out to NDA at 402-471-2351 with any questions about NWS.

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402-471-2341
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