

New World Screwworm



WHAT ARE NEW WORLD SCREWORMS?

New World screwworms (NWS) are parasitic flies (*Cochliomyia hominivorax*) that lay eggs in open wounds or mucous membranes such as the nostrils, eyes or mouths of live warm-blooded animals. These eggs hatch into a type of parasitic larvae (maggots) that only feeds on living tissue, while other species of fly larvae prefer dead or necrotic tissue. NWS larvae burrow or "screw" into living tissue with sharp mouth hooks, giving them a screw-like appearance. Infested wounds quickly become infected and, if left untreated, will kill the infested animals.

If you see LIVE animals with LIVE maggots, report to local biologists. Early detection is key. Do not delay if you suspect a NWS infestation. Reporting is crucial to the implementation of management actions and eradication of NWS.



COMMONLY AFFECTED WILDLIFE SPECIES

- White-tail deer
- Rabbits (jackrabbits, cottontails)
- Small mammals
- Turkey

Note: All warm-blooded mammals can be infested

COMMON INFESTED AREAS

- Newborn animals' umbilical stump/navel
- Mucous membranes – genitalia, eyes, nose, ears, mouth
- Damaged skin – cuts, scrapes, stings, tick bites, antler/velvet shedding
- Management-related – dehorning, ear tagging, castration, branding

INFESTATION MIGHT LOOK LIKE

- Open sores or wounds with maggots
- Animals shaking heads or irritated demeanor
- Foul rotted flesh odor

Screwworm infestations occur year-round in temperate regions such as South Texas but are generally seasonal (Spring through Fall) in other areas like the Panhandle and farther north.

REPORTING IS CRITICAL! IF YOU SUSPECT NWS INFESTATION



Livestock or Domestic Pets

(800) 550-8242

Find the list of regional offices at
tahc.texas.gov/agency/contact.html#regions



Wildlife

(512) 389-4505

Find wildlife biologists by county at
tpwd.texas.gov/wildlife



Humans

(888) 963-7111

dshs.texas.gov/regional-local-health-operations/public-health-regions

MANAGING THE SPREAD

- Monitor animals on a regular basis for signs of NWS infestation and immediately report any suspected signs of infestation.
- If a living animal is infested with NWS, ensure all maggots are removed and destroyed to prevent them from dropping to the ground and pupating into adult NWS flies.
- Comply with all state and federal regulations related to animal movement into and out of NWS infested areas.
- Keep open wounds on animals and people clean and covered.
- Treat clothing, gear, and people with proper repellents.
- Consider scheduling management related activities during winter months when flies are less abundant to decrease the risk of NWS infestation.

COLLECTION AND PROCESSING

- Gently remove all maggots from within the wound.
- Maggots being submitted as a sample must be taken from the deepest part of the wound, placed in a vial or screw cap container and submerged in 70% alcohol. Containers must be sealed and placed in a plastic bag for shipment or handoff to your local wildlife biologist.
- Seek veterinary guidance to treat, bandage, and follow-up on wounds in captive living animals.
- The area surrounding the animal may be treated with an approved spray to kill any maggots that may have dropped from the infested wound. *See link under additional resources.*
- **For deceased animals**, cut out the entire affected area, place in a tightly sealed container or double bag, and freeze until pickup can be coordinated with TPWD staff.

ADDITIONAL RESOURCES

USDA-APHIS New World Screwworm Web Page

<https://www.aphis.usda.gov/livestock-poultry-disease/cattle/ticks/screwworm>

Texas Animal Health Commission New World Screwworm Emergency Management Guide

https://www.tahc.texas.gov/animal_health/feverticks-pests/EMGuide-NewWorldScrewworm.pdf

Texas A&M Veterinary Medical Diagnostic Laboratory

<https://tvmdl.tamu.edu/>

History of the New World Screwworm in the U.S.

<https://www.nal.usda.gov/exhibits/speccoll/exhibits/show/stop-screwworms--selections-fr/introduction>

Pesticides to Potentially Use Against New World Screwworm (NWS, *Cochliomyia hominivorax*)

<https://www.aphis.usda.gov/sites/default/files/pesticides-for-nws.pdf>