

New World Screwworm



New World screwworms (NWS) are parasitic flies (*Cochliomyia hominivorax*) that lay eggs in open wounds or mucous membranes such as the nostrils, eyes, genitalia, newborn navels or mouths of live warm-blooded animals. These eggs hatch into a type of parasitic larvae (maggots) that only feed 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 maggots, report to your local TPWD wildlife biologist. Early detection is key. Do not delay if you suspect an NWS infestation. Reporting is crucial to the implementation of management actions and eradication of NWS.



INFESTATION MIGHT LOOK LIKE

- Open sores or wounds with maggots
- Animals shaking heads or irritated demeanor
- Foul rotting flesh odor
- Separation from the herd

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

IF AN INJURY IS IDENTIFIED

- Immediately secure animal and follow veterinary recommendations for NWS wound treatment.
- If an NWS infestation is suspected, collect as many larvae as possible from the deepest part of the wound and place into a container with isopropyl alcohol.
 - Remove and kill all remaining larvae in wound.
 - Contact your local TPWD biologist or local veterinarian to report suspected NWS and coordinate sample collection.
 - Monitor deer for wound resolution and additional infestations.

REPORTING IS CRITICAL!

IF YOU SUSPECT NWS INFESTATION IN YOUR DEER BREEDING FACILITY, CONTACT:

Livestock/Exotics

(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/biologist

RECOMMENDED MANAGEMENT PRACTICES

- Check pens daily for mortalities, open wounds, injuries and maggots.
- Monitor fawns during fawning season for umbilical infestations.
- Conduct CWD ante-mortem testing during colder months when flies are less active (November-March) if possible and follow veterinary recommendations for wound treatment.
- Monitor deer for injuries/wounds while preparing for transfers in/out of the deer breeding facility.
- Follow veterinary recommendations for wound treatment when tagging deer or other animal working operations.
- Spray down trailers before and after transfers with approved EPA or FDA pesticide treatments.
- Avoid moving carcasses until all living NWS larvae have been removed and killed via freezing, burning, placing in 70% isopropyl alcohol, or using pesticides approved by the EPA for control of NWS. Larvae from deep wounds should be methodically removed to ensure no larvae remain in the carcass.
- Fly control should be continued with use of fly traps, fans, misters, approved treatments, etc.
- Maintain infrastructure and fencing to reduce injury to deer.

IN THE EVENT OF A NWS DETECTION IN TEXAS, TEXAS ANIMAL HEALTH COMMISSION (TAHC) WILL IMPLEMENT INFESTATION ZONES WITH LIVE ANIMAL MOVEMENT CONTROLS IN AFFECTED AREAS.

- Identification, inspection, and treatment of live animals will be required prior to movement out of an infestation zone.
Transfers of deer should be scheduled a few weeks prior to movement and the Big Game permits staff should be notified to facilitate inspections.
- More detailed information on infestation zone boundaries and inspection details will be released as they become available through the Big Game Permits Office, (512) 389-4585.

ADDITIONAL RESOURCES

USDA-APHIS New World Screwworm Webpage

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

Pesticides for Control of New World Screwworm (NWS, *Cochliomyia hominivorax*)

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

Texas Animal Health Commission New World Screwworm Webpage

<https://www.tahc.texas.gov/emergency/nws.html>

New World Screwworm: A Threat to Wildlife

<https://www.aphis.usda.gov/sites/default/files/factsheet-nws-hunters-508.pdf>

Texas A&M AgriLife Wildlife Monitoring Webpage

<https://agrilifeextension.tamu.edu/wildlife-monitoring-and-management-for-new-world-screwworm/>

Texas Parks and Wildlife New World Screwworm Webpage

<https://tpwd.texas.gov/screwworm>