

Kentucky Office of State Veterinarian

Protocols for the Potential Detection of New World Screwworm in Livestock Veterinary Guidance

New World screwworms (NWS) are larvae or maggots of the NWS fly (Cochliomyia hominivorax) that cause the painful condition NWS myiasis. This guide is provided to assist veterinary practitioners and their staff on protocols related to the identification, treatment, and reporting of NWS in Kentucky livestock. (www.kyagr.com)

Identification

There are several flies associated with wounds, but only NWS feed on living tissues, compared to dead tissues and fluids. NWS infestation is most often associated with the presence of a preexisting wound but may also be found in mucous membranes. Any wounds should be examined for the presence of myiasis (infestation with larval flies/maggots). The identification of NWS is done by larvae collection and evaluation. NWS larvae have a series of backwardly protruding spines around a tapered body, giving a screw-like appearance, helping to identify the pest. Please see the TAHC NWS collection guide for additional information on proper larvae collection for official laboratory identification.

Please see the KDA-OSV NWS collection guide for additional information on proper larvae collection for official laboratory identification.

Prevention & Treatment

Prevention

- A) Thorough daily inspection of animals for evidence of wounds / myiasis
 - Treatment
- 1) Surgical Debridement
- 2) Topical Larvicides (permethrin Spray)
- 3) Systemic Anthelmintics (avermectins)
- 4) Environmental Sterile Fly releases

Reporting

Early detection and reporting are critical. Report all suspected and confirmed cases of NWS immediately.

