

# NEW WORLD SCREWWORM

## SAMPLE COLLECTION PROTOCOLS FOR VETERINARIANS

New World Screwworm (NWS) flies or larvae can be found in pre-existing wounds or mucous membranes of animals, causing NWS myiasis. After observation, if NWS myiasis is suspected, samples should be collected and submitted for official identification. Suspected cases of NWS myiasis are reportable to the Missouri Department of Agriculture (MDA). This guide is provided to aid in the collection and submission of larvae for official laboratory identification.

### Supplies

The following are needed for NWS collection:

- Gloves
- 70% alcohol (ethanol or isopropyl)
- Forceps
- Screw cap, red top tube or container
- Tape to seal container
- Plastic bag with a zipper closure
- NVSL Parasite Submission Form VS 5-38

### Collection Procedures

- Using forceps, gently remove larvae of different sizes from several sites within the open wound. Ensure samples are removed from the deepest part of the wound, as NWS larvae burrow deep into tissues. Larvae found more superficially may be secondary myiasis from other flies.
- Place the larvae in the vial or container and ensure all specimens completely submerged in alcohol.

### Submitting Samples

1. Contact MDA at (573) 751-3377 or USDA at (573) 658-9850 to receive a FAD# and a pre-paid shipping label.
2. Fill out the NVSL Parasite Submission Form VS 5-38 with as much information as possible. Complete a form for each head of livestock. The form can be found at: [https://www.aphis.usda.gov/sites/default/files/vs\\_form5\\_38.pdf](https://www.aphis.usda.gov/sites/default/files/vs_form5_38.pdf).
  - Include the provided FAD# in block 31 'History or Additional Information.'
  - A premises ID number (PIN) will be assigned if the subject premises does not already have a PIN.
3. Email a scanned copy of the completed NVSL Parasite Submission Form VS 5-38 to MDA at [animalhealth@mda.mo.gov](mailto:animalhealth@mda.mo.gov) and USDA at [vsmo@usda.gov](mailto:vsmo@usda.gov) with the subject line: Suspected Screwworm. NVSL will be notified by MDA or USDA that the sample is on the way.
4. Ship the sample(s) to NVSL in a properly secured shipping container with completed NVSL Parasite Submission Form VS 5-38 and the provided pre-paid shipping label.

### Premises ID Registration

Missouri producers are strongly encouraged to register for a Premises Identification Number (PIN) to assist animal health officials with necessary contact information in case of a disease concern like New World Screwworm. The ability to trace animals exposed to disease is an absolute necessity to minimize what could be a catastrophic event. For more information visit <https://agriculture.mo.gov/animals/biosecurity/#fed>.

### Additional Information and Resources

USDA NWS Pest ID Card



USDA NWS Page



MDA NWS Page



**MISSOURI**  
dept. of  
**Agriculture**

**Animal Health Division**

(573) 751-3377  
[Agriculture.Mo.Gov](http://Agriculture.Mo.Gov)