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New World Screwworm

Having just attended the Beef Improvement Federations annual symposium in Amarillo, Texas, I'm walking away armed with a wealth of topics to discuss in news columns this summer. Additionally, the USDA just put out updated information on response to this threat on our southern border, so it seems timely to discuss New World screwworm (NWS) today. Texas is definitely on high alert!

So why all the attention for a pest that has been eradicated from the United States since the 1960's? Populations of NWS have recently been migrating northward in Mexico, coming with-in 700 miles of the US southern boarder causing alarm for beef producers in boarder states and suspension of imports of livestock from Mexico into the US since May. Trade disruption with a major partner in Mexico and the potential for this pest to reestablish in the states has created the renewed focus on this insect.

The New World screwworm (*Cochliomyia hominivorax*) is a parasitic fly native to the Western Hemisphere. It lays eggs in the living tissue of fresh wounds in warm-blooded animals. The name screwworm refers to the feeding behavior exhibited by the maggots as they burrow (screw) into the wound. These maggots and their feeding cause extensive damage by tearing at the hosts' tissue with sharp mouth hooks. The wound will become larger and deeper as more and more eggs hatch and larvae feed on the living tissue. This results in serious and often deadly damage to livestock, wildlife, pets, and in rare cases, humans if left undetected and untreated.

NWS has been successfully controlled through the release of sterile males, known as the sterile insect technique. This approach, along with regular active surveillance and livestock inspections, has been very successful in controlling populations. USDA's recent $21 million expenditure went toward renovating an existing fruit fly production facility in Metapa, Mexico, which will provide an additional 60-100 million sterile flies a week to stop the spread, on top of the over 100 million already produced in Panama. This will result in at least 160 million flies per week.

U.S. Secretary of Agriculture Brooke Rollins just announced the launch of an $8.5 million sterile New World screwworm fly dispersal facility in South Texas and rolled out a five-pronged plan to enhance USDA's current strong ability to detect, control, and eliminate this pest. Complete details can be found on the USDA website, but the essence of the plan is as follows.

1. Stop the Pest from Spreading in Mexico and Ensure Full Partners in Eradication
2. Protect the U.S. Border at All Costs
3. Maximize Readiness
4. Take the Fight to the Screwworm
5. Innovate to Eradication

While this is not a current, direct threat to livestock, pets and wildlife in Kansas, it is important to educate everyone about this risk and keep a watch for signs of infestation. The last time this pest was found close to the US mainland in the Florida Keys, it was believed to have been transported there on a pet, so vigilance around travel into Central and South American countries is paramount. Texas A&M AgriLife Extension has a good website dedicated to this topic: https://agrilifeextension.tamu.edu/new-world-screwworm/ The USDA site is: https://www.aphis.usda.gov/livestock-poultry-disease/cattle/ticks/screwworm