NEW WORLD SCREWWORM ERADICATION

Screwworm Lifecycle

The New World screwworm (NWS) is a fly that has a particularly gory way of harming mammals. Female NWS flies lay their eggs in open wounds or body orifices and when the larvae hatch, they burrow deep into the skin like a screw driving into wood. These maggots feed on living tissue, causing larger wounds as they go. Humans and all warm-blooded animals, including cattle, horses, deer, cats and dogs are susceptible to infection.

History & Eradication in the U.S.

The United States successfully eradicated NWS in 1966 using the sterile insect technique (SIT). This groundbreaking method involved releasing sterilized male flies into the environment, which mated with wild females, effectively breaking the reproductive cycle. The eradication campaign saved the U.S. livestock industry and U.S. economy millions of dollars and is celebrated as one of the most successful pest control programs in history. To prevent reinfestation, a buffer zone in Panama was established, and monitoring programs remain in place to ensure early detection.

Risk to Non-Bovine Animals

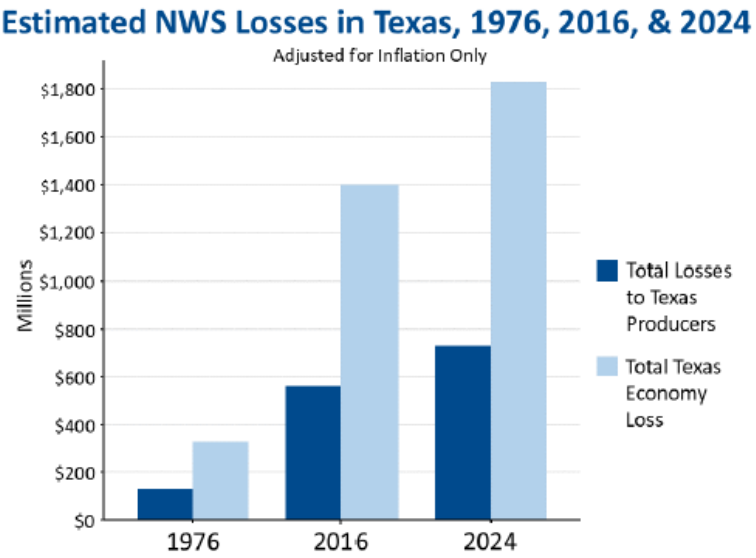
NWS poses an even higher risk to wildlife than livestock from a mortality stand point. Texas wildlife, including white-tailed deer, were decimated by the NWS in the 60s. Not only did Texas lose native wildlife in vast numbers, hunting and other activities crucial to Texas' economy suffered. Compared to the 60's, today's larger wildlife population pose new challenges. The expansive, home ranging Nilgai make NWS detection difficult. Feral hogs reproduce twice a year, creating ideal conditions for infestation in these populations. Overall, a NWS outbreak today would spread more quickly and cause more damage to Texas wildlife.

Where We Stand

The continued existence of the screwworm in remote foreign areas has presented a constant threat to the U.S. and its cattle herd. TSCRA supports eradication activities with the use of appropriate resources to protect the U.S. and assure foreign and domestic efforts are successful.

Labor Shortage Impact

Screwworm treatment for infested livestock is extremely labor intensive and requires ranch staff riding through cattle daily providing treatment to open wounds and infections. While boots on the ground in the 60s was effective, that will not be the case today. The cow to ranch hand ratio is much higher than it was 50 years ago. As a result, it will be more difficult to provide critical care in a timely and effective manner to livestock.



Economic Impact

Decades ago, the eradication program required $750 million, which is a staggering number but still less than the economic losses that occurred. Since then, there have been a few minor outbreaks. According to USDA cost analysis summarized in the chart above, a NWS outbreak roughly the scale of the 1976 outbreak could cost Texas producers $732 million per year and the Texas economy a loss of $1.8 billion today. Funding eradication and containment efforts are critical to avoid the economic hardship that would result if the NWS was reintroduced to Texas and the U.S.

According to a 2022–2023 survey by Texas A&M University, white-tailed deer hunting and the support of landowners in Texas contributes $9.6 billion to the state's economy each year. The NWS caused widespread deaths in deer populations, as fawns were particularly vulnerable to infestation. In some areas of Texas, deer populations were reduced by up to 80%.

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