Tennessee One Health Meeting

# 3/28/19

# USDA WS TN Feral Swine Program

* $20 mil annually national feral swine mgt program
* Six components that make up program

## *Field Component*

* Ultimate goal is reducing high level states. USDA wants to see all states reduced to no feral swine
* TN is a level three state
* There is different funding baselines for each level

## *Research Component*

* USDA working on feral swine toxin, Sodium Nitrite
* Conducting econ analysis to assess feral swine damage
  + Damage risk to livestock
* National Feral Swine Genetic Archive
* Environmental DNA technique to detect feral swine genetic markers in water

## *Disease and Population Monitoring component*

* FY16
  + CSF 0%
  + PRV 19%
  + SB 5.5%
* African Swine Fever surveillance program in the works
  + Anyone in the field is to notify USDA of any sick and dying swine

## *Feral Swine Damage Mgt*

* Damage caused: agriculture, ecosystems, property, threatened and endangered species, national security
* Methods of feral swine take: 3 different trap methods, helicopter
* Goal in TN is to remove all small pocket populations to prevent point source spreading

## *Environmental and Public Challenges*

* Raccoons, black bears, feral swine dogging

# Asians Longhorn Tick Outbreak

## *Background*

* Ticks got on woman from sheep
* Ticks were not normal

## *Tick – Haemaphysalis Longicornis*

* Ticks are spreading throughout the east coast and inland
* 3 host hard tick orig from Asia
* Like wet environments, can survive harsh winters
* Larval stage cannot be detected on animal
* There are two other haemaphysalis ticks in the US, bird and rabbit tick
* Let entomologist identify
  + The only difference between American and Asian longhorn ticks are the fang lengths
* Longicornis has been here since at least 2010
* USDA urging people to take a second look at ticks identified as bird or rabbit tick
* In bird species, has only been found on hawk
* Hosts: primarily cattle, but majority mammals and large avians
* Risks:
  + Tick burdens decrease growth and production
  + Heavy tick burdens can exsanguinate/bleedout the animals
  + Carries zoonotic pathogens, rarely attaches to humans
  + Questions our security against other invasive pests
* Biology
  + Do not need males to lay eggs
  + Create explosive mini populations – animals may die from anemia or exsanguation
* Life cycle
  + Females lay ~2000 eggs
  + Larvae hatch and crawl to tips of grasses
  + Dispause over winter
* Believe it came from people, imported livestock and pets, imported packages, in shipping containers
* NJ is most densely populated states
  + Epidemiologic surveys done on imported animals in NJ
* Outreach
  + Empower, not frighten
  + Engage on collection and reporting
* Emergency Management Response System Database
  + Allows you to track everything that is going on
  + Ability to assign tasks to people
  + All movements tracked in database
  + Can be used for indemnity, post monitoring plans, etc.
* Doing a grassroots study of imported dogs and horses to examine 20 different species of ticks that carry zoonotic diseases