

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 exsanguination
- 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