VETERINARY SERVICES: OVERVIEW OF 2017

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Outline

• New World Screwworm (NWS) in the Florida Keys
• HPAI/LPAI in Tennessee, Alabama, Georgia, and Kentucky
• Training and Exercise Program: Highlights and progress
• FAD PReP updates
New World Screwworm

• Severe flystrike wounds had been observed in Key deer in Summer 2016

• The National Key Deer refuge contacted Florida Department of Agriculture and Consumer Services in September, who submitted a Foreign Animal Disease investigation
  • NVSL confirmed NWS in a Key deer on September 30, 2016

• Confirmed animal infestations on 6 different islands of the Florida Keys and 1 case on the mainland:
  • 145 cases total, mostly in Key deer
  • Wild, fertile NWS flies found on 13 Keys
  • No production livestock were affected in the Keys or mainland Florida
NWS: Incident Timeline

- **First Presumptive Positive Key Deer**
- **First Presumptive Positive Domestic Animal**
- **First Confirmed Case in FL Keys 9/30/2016**
- **Interdiction Station Opened**
- **First Fly Release in FL Keys**
- **First Fly Assessment**
- **First APHIS Deployment**
- **Last Positive Fly Assessment in FL Keys**
- **Last APHIS Deployment**
- **First Confirmed Case in Homestead, FL**
- **Only Positive Fly Assessment in Homestead, FL**
- **Interdiction Station Closed**
- **First Fly Release on Mainland FL**
- **Last Fly Release on Mainland FL**
- **Last NWS Confirmed Positive Case**
- **Last Fly Assessment**
- **USDA Declared NWS Eradicated 3/23/2017**
- **Last Fly Release in FL Keys**
NWS: Response Activities

• VS partnered with USDA APHIS International Services (IS) and FDACS to organize a unified incident command in Monroe County, Florida

• Implementing the sterile insect technique (SIT)

• Interdiction Station, or animal health checkpoint, established in Key Largo

• Information management and communications with States, local government, stakeholders, and the public
NWS: Disease Control, Euthanasia, and Treatment

- Panama COPEG facility immediately increased its production of sterile screwworm pupae for SIT
- 35 sterile fly release sites: 31 in the keys, 4 on the mainland
- Fly site assessments and trapping were used to determine the distribution of sterile flies and effectiveness of SIT
- Severely infested Key deer were euthanized by captive bolt
- By late October, deer were treated with Doramectin where possible:
  - 20 medication stations on 6 islands
  - Over 15,000 treatment applications
NWS: Zoning Areas

10/24/16 to 1/4/17

1/5/17 to 3/23/17
NWS: Total Deployments

- State Agriculture Departments: 216
- USDA:APHIS: 184
- Other Federal Agencies: 104
- COPEG: 27
- Monroe County: 8
HPAI/LPAI in the Southeast

- On March 3, 2017, samples from a flock with clinical signs in Lincoln County, TN, were presumptive positive for H7 influenza at a NAHLN lab
  - NVSL confirmed HPAI the next day
  - H7N9 of North American wild bird lineage (unrelated to Asian H7N9)
- LPAI H7N9 confirmed by NVSL in a neighboring TN county on March 8
- NVSL confirmed H7 or H7N9 on 14 premises:
  - HPAI confirmed on only 2 of those, both in Lincoln County, TN
- On the 14 Infected Premises, nearly 253,000 birds were depopulated or succumbed to the HPAI virus (mostly commercial broiler breeder flocks)
- Epidemiological evidence suggests lateral spread between the first and second HPAI investigations, but evidence suggests multiple, independent introductions for the LPAI premises
HPAI/LPAI: Epidemiological Curve*

*By Earliest Known Date of Infection; This may be the date clinical signs were observed, when the suspect case definition was met, or when there was a presumptive positive result at a NAHLN laboratory.
HPAI/LPAI: Affected Counties

Note: Map produced during the incident by the USDA APHIS VS Center for Epidemiology and Animal Health.
HPAI/LPAI: Overview of the Response Effort

• HPAI Infected Premises were depopulated using foam

• LPAI Infected Premises were depopulated using a variety of methods (ventilation shutdown was not implemented)

• 12 premises depopulated some or all of their birds

• All premises that depopulated birds used burial as their method of disposal

• 11 premises conducted virus elimination (7 used wet disinfectant)

• On average, it took premises 48 days from NVSL confirmation to restock approval (range of 23 to 92 days)
  - HPAI premises took on average 87 days
A unified State-Federal Incident Command (Tennessee, Alabama, and USDA APHIS) responded to the HPAI detections and the LPAI detections related to the initial HPAI findings
  • Kentucky and Georgia managed their LPAI Infected Premises with support from VS SPRS District 2 and 3, as requested

For policy guidance and resource coordination, the HPAI Incident Coordination Group (ICG) at APHIS headquarters was ramped up

Indemnity payments for the 2 HPAI Infected Premises were rapidly distributed; flat-rate payments were distributed to HPAI Infected Premises for virus elimination activities
  • LPAI-infected premises that elected to depopulate were not indemnified or compensated for virus elimination by APHIS
HPAI/LPAI: Total Deployments from APHIS and States

- 51 total deployments of APHIS personnel:
  - 45 on-site
  - 45 were from VS, 41 of those from SPRS, 34 from District 2
  - 10 term hires
- 19 deployments from Tennessee, 10 from Alabama
Training and Exercise Program

• Upcoming Agriculture Response Management and Resources (ARMAR) exercise: the VS TEP Resource Management and Incident Command Functional Exercise (May 8-10, 2018):
  • A joint Federal-State-industry FMD exercise on resource management and unified Incident Command
  • 11 states, NASAHO, APHIS LPA, and VS currently playing

• VS TEP resources are now available on FAD Eye.
  • Plans, webinars, and other materials housed there
Training and Exercise Program

• Training events this year have included (but are not limited to):
  - LPA Risk Communications
  - Animal health specific ICS
  - Poultry depopulation and disposal
  - EMRS2
  - Case Manager Supervisor
  - Secure Food Supply

• Exercises held in 2017 include (but are not limited to):
  - OH-SMART
  - Pilot Transfer of Command Tabletop
  - Livestock Emergency Operations Plan
  - VS NIMT
  - FADD Drills
FAD PReP Selected Updates

• *HPAI Response Plan: The Red Book*, new version May 2017
  • Adds policy guidance from the 2016 outbreak
  • New surveillance and permitted movement sections, and additional guidance on restocking
  • Addresses comments on the Draft August 2015 version, and reflects policy changes
  • NWS Maps and Timelines & SIT Ready Reference Guides and other materials

• Reported FMD in 2016 and Reported H5 HPAI in 2016 Ready Reference Guides
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