Management and Disposal of Waste: A State Cooperative Perspective

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Virginia’s Experience with AI

- 1984 – 69 flocks, H5N2
- 1999 – 1 flock, H5N2
- 2002 – 197 flocks, H7N2
- 2007 – 1 flock, H5N2
- 2007 – 1 flock, H5N1
Carcass Disposal Methods in 1984

- On-Farm Burial
- Landfilling
Methods of Disposal Used in 2002

Percentage of Birds by Method

- On-site Burial: 65%
- Controlled slaughter: 20%
- Incineration: 14%
- Landfilling: 1%
- Composting (Ag-Bag & In-house)
The Delmarva Experience

- 2004 avian influenza outbreak
- In–house composting
- 5–pound broilers
- Confined to 3 poultry farms
Research in Virginia 2004

Successful in-house composting of large turkeys
First Successful Use of Composting for Turkeys During a Disease Outbreak

Sugar Grove, West Virginia 2007
Shenandoah County, Virginia 2007 LPAI Outbreak
Figure 1. All HPAI Detections as of 8/27/2015 (as reported on www.aphis.usda.gov) * one or more detections may have occurred in county

HPAI 2015
Disposal Methods

- 85% Composting
- 8% Burial
- 7% Incineration or Landfilling
Carcass Disposal Oversight

- Managed by USDA
- Subject Matter Experts
- Composting Technical Committee
- HPAI Composting SOP
So what?
Method and Model
Adapting Protocol for International Use

- 68 countries*
- 6,946 outbreaks*
- 12 subtypes*

*2013-18
Livestock SOP
Hurricane Matthew 2016

North Carolina Animal Agriculture Impacts
NCDA&CS Response and Recovery

Mike Mayes / Joe Hudyncia
N.C. Department of Agriculture & Consumer Services
Figure 1. Hurricane Matthew storm total rainfall, October 4–10, 2016 (Southeast Regional Climate Center, 2016).
Agriculture Impacts

- 1,809,124 commercial poultry
- 49 farms with >180 total poultry houses
- 2,800 commercial nursery swine (1 farm)
- Major field crops ~$400 million
- Landscape and nursery crops >$20 million
Collaboration with FEMA to procure carbon material
Aerial View of On-Farm Compost Windrows!

Success!
Federal government to pay for all debris removal from Virgin Islands in wake of Hurricane Maria
Method and Model
QUESTIONS?

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