

2015 HPAI Response—3D Issues

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Virginia's Experience with AI

- ▶ 1983 – 69 flocks, H5N2
- ▶ 1999 – 1 flock, H5N2
- ▶ 2002 – 197 flocks, H7N2
- ▶ 2007 – 1 flock, H5N2
- ▶ 2007 – 1 flock, H5N1

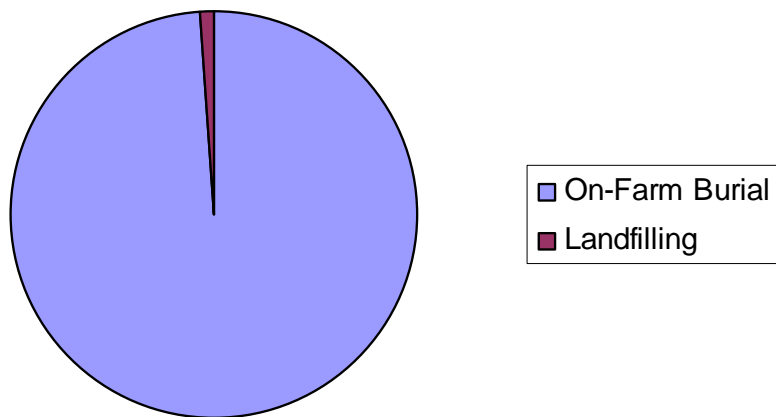
Avian influenza
STRIKES
Virginia poultry
farms



Avian Influenza Outbreaks in 1984

- ▶ On-site burial main disposal method
 - 88% or 5700 tons of carcass
 - 12% or 665 tons disposed of in local landfill

1984 Carcass Disposal Methods



Concerns with On-site Burial

- ▶ Potential for surface and groundwater contaminated groundwater
- ▶ Impact on property values

A 1984 on-farm
burial site at present

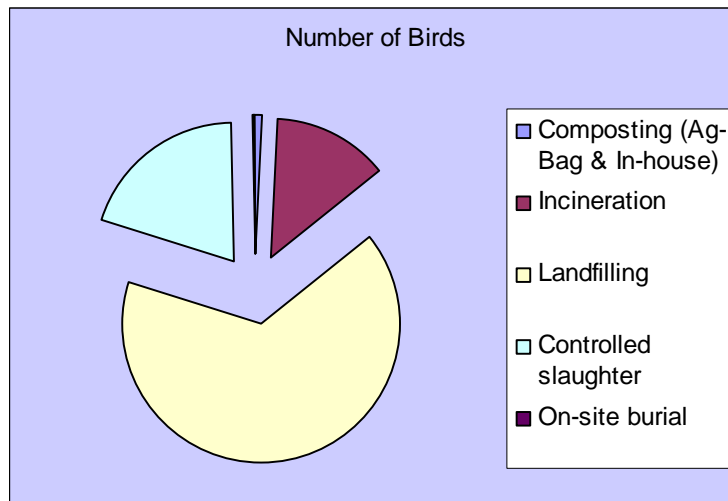


...and where intact
carcasses were
discovered during
excavation in 1998

Methods of Disposal Used in 2002*

Method of Disposal	Number of Birds	Percent of Total
On-site Burial	15,000	0.3
Controlled slaughter	943,000	19.9
Incineration	641,000	13.4
Landfilling	3,103,000	65.5
Composting (Ag-Bag & In-house)	43,000	0.9
Total	4,732,000	100.0

Methods of Disposal Used in 2002



Incineration



Incineration



Landfilling



Composting

In-House Composting turns to Ag-Bag Composting



The Delmarva Experience

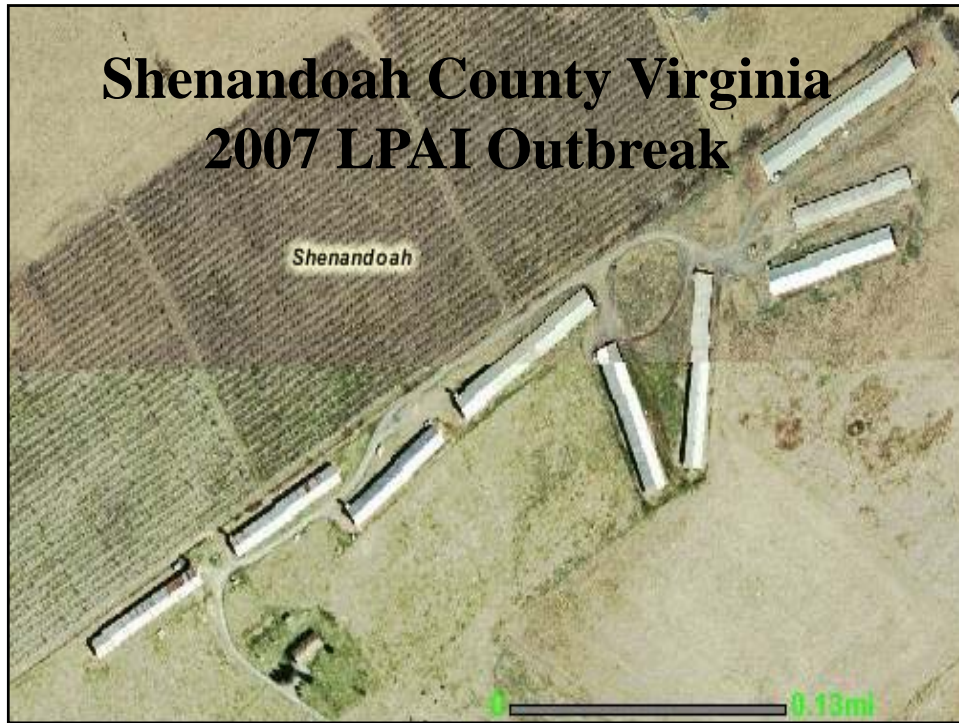
- ▶ 2004 avian influenza outbreak
- ▶ In-house composting
- ▶ 5-pound broilers
- ▶ Confined to 3 poultry farms

Research in Virginia

- ▶ Successful in-house composting of large turkeys



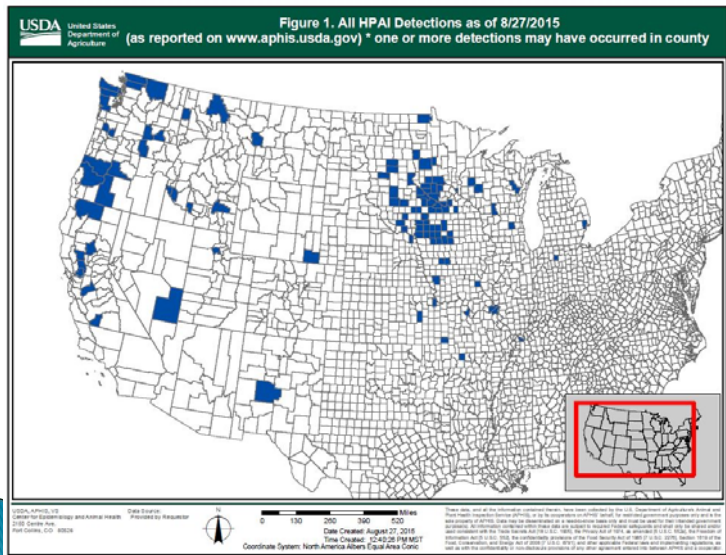
Shenandoah County Virginia 2007 LPAI Outbreak







HPAI 2015



Depopulation: Foam Generator



Depopulation: Foam Nozzle



Depopulation: Foam Nozzle



Compressed Air Foam System (CAFS)



Handheld Foam Systems



Depopulation: Inhalation Agent (CO₂)



Depopulation: Cervical Dislocation and Captive Bolt



Depopulation: Ventilation Shutdown

- ▶ USDA's Ventilation Shutdown Evidence & Policy
- ▶ Depopulation within 24-hours critical
- ▶ CO₂ and water-based foam primary methods
- ▶ VSD recognized as alternative method

Disposal HPAI 2015

Disposal Methods Used

- ▶ 211 commercial premises
 - MN-109 – 108 composting, 1 burial
 - IA-71 – compost/burial/landfill/incineration
 - SD-10 – burial
 - WI-9 – composting
 - NE-5 – composting
 - CA-2 – composting
 - MO-2 – composting
 - ND-2 – composting
 - AR-1 – burial

Contact Information

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