


Overcoming Barriers to Efficient Poultry Litter Distribution and Use on the Delmarva

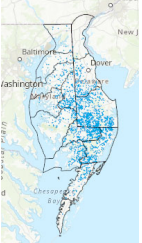



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Virginia Tech



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Welcome to the Delmarva

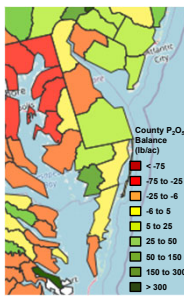

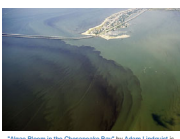

- Includes 14 counties in DE, MD, VA
- Chesapeake Bay Watershed
- 570 million broilers produced
- Corn and soybean production < consumption

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Water Quality Legacy

- Historic and ongoing P surpluses
- Sandy, low organic matter soils
- Drainage systems
- Eutrophication issues

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Alternative Uses of Poultry Litter



Composting

Mushroom Soil

Pelletizing

Manure to Energy

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Land Application is Still Preferred

- Proper litter management
- Better distribution of litter

Help protect our water resources & support productive agriculture



Transport

Storage

Equipment

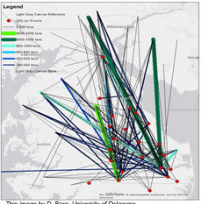
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Despite Available Resources and Alternative Uses...

...we still face challenges with litter distribution and management!

What is stopping us from efficient litter distribution and use on Delmarva?



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We Asked the Ag Community

- Interviews with manure brokers (Fall 2019)
- Survey of poultry growers (Summer 2020)
- **Survey of crop farmers (Summer 2020)**

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Poultry Litter Might Not Be As Available As We Thought!

Statement	Agree	Disagree	Don't Know
Poultry litter is available in my general area.	43%	35%	22%
Poultry litter is available in my area during times when I need fertilizer.	37%	36%	26%

- Seasonal demand
- Clean outs occur year-round with varying frequency
- Litter availability is likely lower farther from poultry farms

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Knowledge About Proper Poultry Litter Storage is Lacking

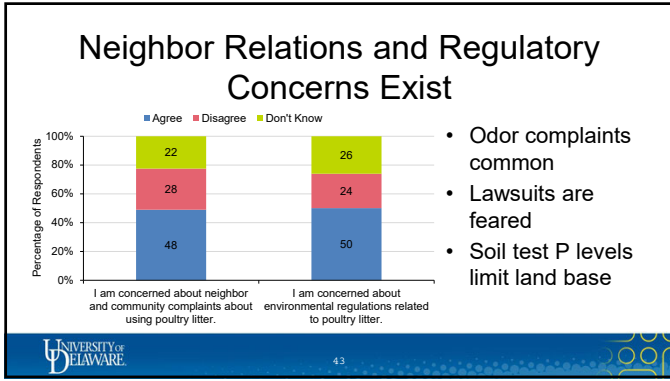
- Covered storage common on poultry farms not grain farms
- Regulatory limitations and neighbor concerns related to field staging

I know how to properly store poultry litter.

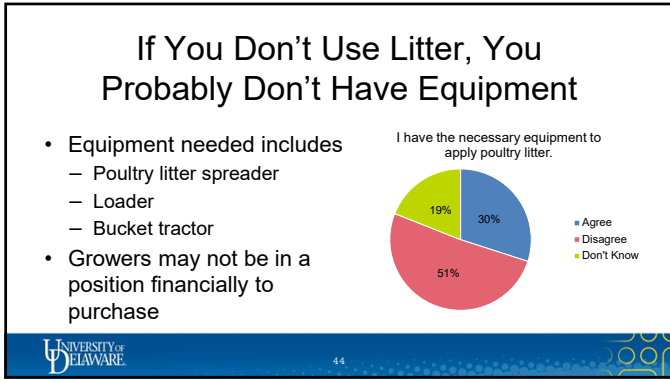
Response	Percentage
Agree	41%
Disagree	28%
Don't Know	31%

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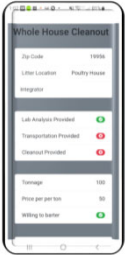
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Delmarva Manure Market Prototype

Facilitating Connections

- Build platforms to connect
 - Sellers (poultry growers)
 - Buyers (crop farmers)
 - Service providers (brokers, haulers, etc.)
- Must consider accessibility amongst parties


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Enhancing Manure Transport

- Transport cost-share available
- Aligning programs across political boundaries could improve distribution




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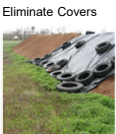
Manure Shed



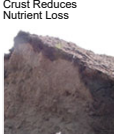
Proper Field Staging



Eliminate Covers




Crust Reduces Nutrient Loss



Improving Litter Storage

- Expand market access
- Build on-farm or regional storage
- Encourage field staging
 - Requires education
 - Some regulatory constraints


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Increasing Equipment Access

- Cost-share for purchase
- Expand custom applicator services
- Equipment sharing options (biosecurity)



This Photo by University of Delaware Extension



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Key Observations

1. Responsible litter management supports crop production and protects water quality.
2. Access poultry litter can be an issue.
3. Delmarva farmers face additional barriers to using poultry litter.
4. Programs/policies should support litter access, and responsible transport, storage, and use.




These Photos by University of Delaware Extension




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Thank you!

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