

# Characterization Study

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Swine Industry

October 19, 2016

## Purpose

Identify Characteristics of the regional Commercial Swine Industry to Improve the Model Data Inputs for Scenario Builder and the Phase 6 CBW Model

Identify	Swine Types	How Grown	Weight	Manure Produced/gallons/yr.	cleanout/yr.
•	Finishers	2.5 turns/yr	55-270 lbs	200gal/animal	2
•	Breeders		375-450 lbs	200gal/animal	2
•	Nurseries	6.5 turns/yr	13-55 lbs	45 gal/piggy	2
•	Gilts	NS Only 3 Facilities in Va and Pa found			
•	Boars	A Very Small Part of the Sow Population <1%			



# Status of Work Performed by Virginia Tech

Interns contacted and collected current and historical data on 52 growers in Virginia and 72 in Pennsylvania so far.

Information collected involved two integrators Murphy Brown (Smithfield) and Country View Family Farms.

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# Status of work

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- Contacted and collected historical and current data from 124 growers so far, more to follow
- Collected manure samples from 21 growers whose samples were over 12-14 months old. These samples were sent both to Penn State University and Clemson for analysis.
- Also Identified 71 Storage facilities that have not been reported as a part of any state or federal cost share program in Pa.
- Identified following types of swine grown:

**Sows**

**Finishers**

**Nurseries**

**Gilts**

**Boars**

# Status of Work

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## Producer Data Collection Points Completed

- 15 Sow Operations (each operations had as many as 13 Boars )
- 78 Finishers
- 28 Nurseries
- 3 Gilts



# Status of Work

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- Also Identified number of turns/year.
- Population/turn and Population Capacity.
- Number of cleanouts per year, including months of storage and storage capacity.
- Average Number of cleanouts is 2.0 Months of storage ave 9 month Pa 6 months Va
- Number of gallons at clean out.
- Number of animals represented by the number of gallons produced.
- Manure Analysis :TKN; NH<sub>4</sub>; P<sub>2</sub>O<sub>5</sub>; K<sub>2</sub>O; Na; Ca; Mg; % Moisture.
- Samples taken were split between Penn State and Clemson analysis labs.

# Status of Work

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- All Information Sent to Penn State Univ. and VT PI's for Analysis, grouping, statistics reporting etc.
- The Draft Report goal is to be available by Oct 31