

Characterization Study

Swine Industry

September, 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 | | |
| | • Breeders | | 375-450 lbs | | |
| | • Nurseries | 6.5 turns/yr | 13-55 lbs | | |
| | • Gilts | | | | |
| | • Boars | | | | |

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.

Status of work

- 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

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

- Also Identified number of turns/year.
- Population/turn and Population Capacity.
- Number of cleanouts per year, including months of storage and storage capacity.
- Number of gallons at clean out.
- Number of animals represented by the number of gallons produced.
- Manure Analysis :TKN; NH₄; P₂O₅; K₂O; Na; Ca; Mg; % Moisture.
- Samples taken were split between Penn State and Clemson analysis labs.

Status of Work

- All Information Sent to Penn State Univ. and VT PI's for Analysis, grouping, statistics reporting etc.
- The Swine Analysis report will be provided to the AgWG for review in advance of the October 20th meeting.