MSHMP data collection update 2020-2021

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Reaching the end of the fiscal year, we wanted to report an update on the magnitude of the MSHMP project by describing the data collected and maintained in the MSHMP database that is used to create our reports and to analyze industry related questions and trends.

Breakdown of MSHMP Participants: 37 separate systems made up of 3 regional projects and 31 Production companies and veterinary clinics. Three companies are represented by multiple MSHMP systems due to geographic and management considerations.

There are a total of 2,073 farms within the program, 1,168 breeding herds, 872 growing pig farms and 30 boar studs. The total number of sows monitored in our project is 3,503,287 sows (>3.5 million sows)

The average number of breeding herd per system is 32 (min of 5 and max of 239) with the 50% of the systems having 18 farms or more.

The mean inventory per farm by system (excluding finisher farms) was 2916 sows (ranging those means from 700-6500). Figure 1 shows farm's average inventory distribution per participant system.

Different production types are recorded with 56% of breeding herds, and 38% represented by wean to finish and finisher farms from four participant systems (Table1).

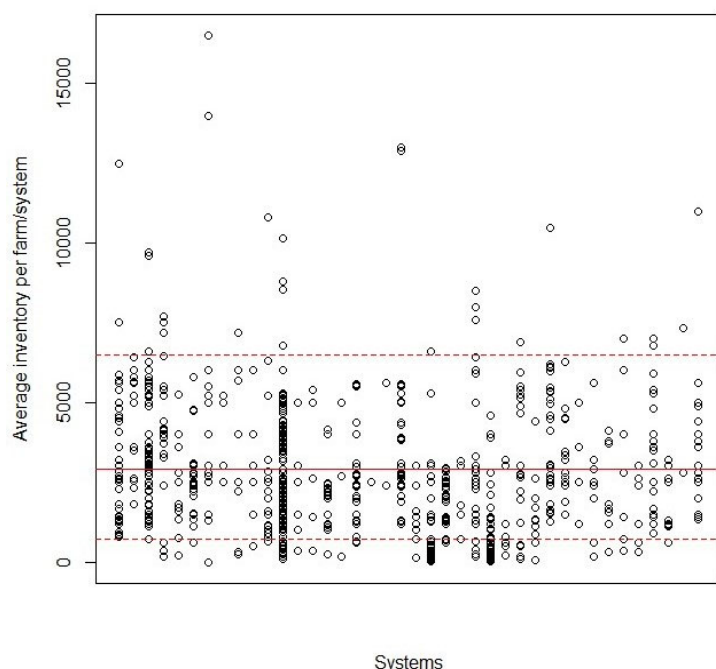| PRODUCTION TYPE	N	PROPORTION
BOAR STUD	30	0.01
BREEDING HERDS	1168	0.56
WEAN TO FINISH	431	0.21
FINISHERS	361	0.17
NURSERY	80	0.04
OTHERS	3	0.00
TOTAL FARMS	2073	1.00

Table 1: Number and proportion of MSHMP-participant farms by production type.

Approximately 20 % of the sow farms are filtered, with 50 being not filtered, 27 partially filtered (filtered only during certain months of the year), and 167 filtered year-round. We are collecting information on the type of filtration system (i.e. positive/negative). Approximately 20% of the farms have reported it, with most of them using positive filtration.

At MSHMP we are currently collecting status for three pathogens causing important impact to the industry. Over the 2020-2021 year, 1056, 1176, and 1170 farms reported status for PRRS, PED, and PDCoV respectively. Farm status regarding Mycoplasma was recorded for eight production systems, comprising 106 sow farms.

Figure 1: Mean inventory per farm, by system. Solid red line indicates the overall mean, and the slashed red lines indicate lowest/highest mean inventory by farm/system.

We would like to thank all MSHMP participants for the willingness to share your information. Without their contributions, we could not generate these summaries.