



## Highlights of NAHMS' Swine 2000: Part III

In 2000, the USDA's National Animal Health Monitoring System (NAHMS) conducted a study of swine operations within the top 17 pork-producing States.<sup>1</sup> These operations represented 94 percent of the U.S. swine herd on operations with 100 or more pigs on December 1, 1999.

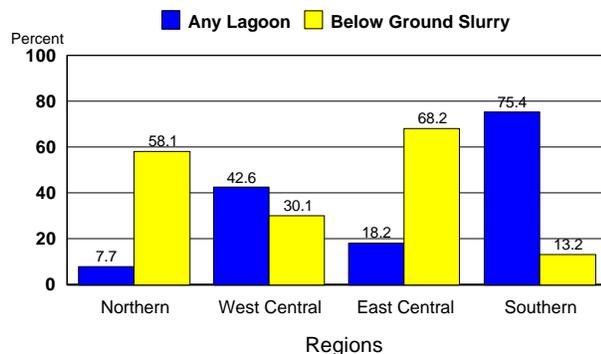
The following highlights were excerpted from a report released in September 2002: *Swine 2000 Part III: Reference of Swine Health and Environmental Management in the United States, 2000*:

- The annual removal rate of breeding-age females via death loss and culling was 45.9 percent.
- Overall, 10.9 pigs were born per litter, of which 10.0 were born alive and 8.8 were weaned (June 1, 2000, through November 30, 2000).
- From June 1, 2000, through November 30, 2000, a higher percentage of pigs died in grower/finisher units (3.0 percent) than in nurseries (2.4 percent). Of pigs entering the grower/finisher unit, 2.1 percent were removed as lightweight pigs.
- Fewer small sites (less than 25 percent) constructed and maintained all swine facilities to keep out birds than large sites (more than 85 percent).
- Of sites using baits around the outside of gestation buildings, about half placed baits more than 50 feet apart, which is too far to be effective for rats and mice.

- Large sites were more likely to place baits inside gestations buildings than outside, and placed baits outside feed-storage facilities more often than inside.
- The majority of U.S. swine production sites had the following animals on their operations: cats (73.1 percent of sites); dogs (70.9 percent of sites); and cattle (51.7 percent of sites).
- Almost 60 percent of U.S. swine production sites in the southern region reported the presence of feral swine in their county, compared to less than 6 percent of sites in the other regions.
- Regardless of herd size, the three most important sources of food safety information were: veterinarians (76.1 percent); pork industry magazines (71.9 percent); and industry programs (69.7 percent).
- Lagoons were used more commonly in the southern region (75.4 percent of sites) and west central region (42.6 percent of sites), compared to the other regions, where less than 20 percent of sites used a lagoon. The northern and east central regions were more likely to use below-ground slurry storage, such as deep pits (Figure 1).

Figure 1.

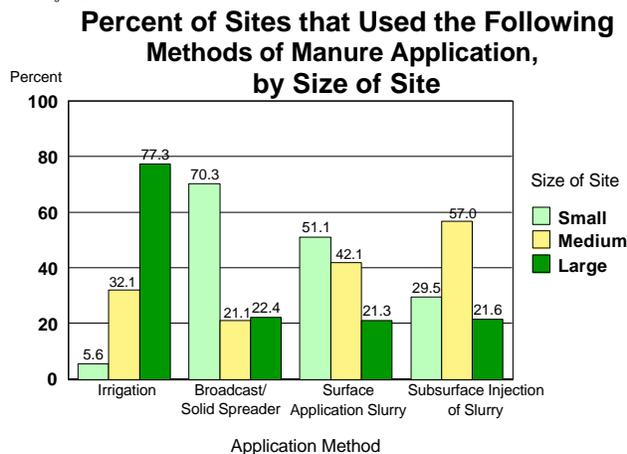
### Percent of Sites that Used the Following Waste Storage Systems, by Region



<sup>1</sup>**Northern Region:** Michigan, Minnesota, Pennsylvania, and Wisconsin. **West Central Region:** Colorado, Kansas, Missouri, Nebraska, and South Dakota. **East Central Region:** Illinois, Indiana, Iowa, and Ohio. **Southern Region:** Arkansas, North Carolina, Oklahoma, and Texas.

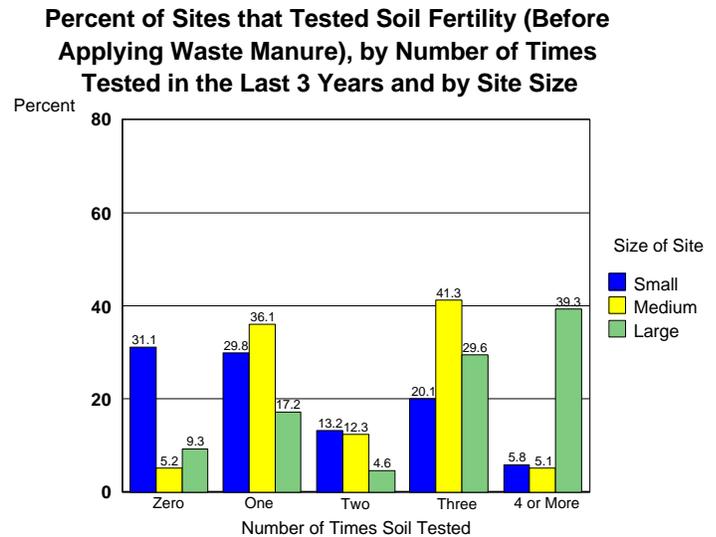
- Almost 85 percent of sites with lagoons used compact clay liners.
- Most often, lagoons on large sites were newer (just 17.3 percent were over 10-years old) than lagoons on small sites (62.7 percent were over 10-years old).
- More than 90 percent of large sites had a formal, written nutrient management plan (NMP), compared to less than 20 percent of small sites. Sites in the west central region were least likely to have an NMP (14.6 percent), while sites in the southern region were most likely to have an NMP (79.5 percent).
- For sites that had an NMP, agricultural extension was the most important source for creating the plan. Other important sources included certified crop consultants, Natural Resources Conservation Service (NRCS) engineers, and agronomists.
- The predominant method of manure application in the southern region was irrigation, a practice rarely implemented in the other regions.
- Small sites applied most often solid manure using broadcast spreaders. Medium-sized sites applied slurry via surface application or subsurface injection. Large sites applied manure most commonly in liquid via irrigation (Figure 2).

Figure 2.



- Almost one-third (31.1 percent) of small sites did no soil fertility testing during the previous 3 years (Figure 3).

Figure 3.



- Numerous strategies were used for controlling odor from swine production sites, including diet manipulation (50.2 percent of sites); manure management (28.9 percent of sites); and air quality (28.2 percent of sites). Diet manipulation was the strategy used most commonly.
- Adding chemical or biological additives to manure to control odor was practiced on 3.6 percent and 12.4 percent of sites, respectively.

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