Livestock Industry Facilities and Environment: Swine Breeding Systems—the Lubbock System

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The Lubbock System and the Modified Lubbock System were developed by the Lubbock Swine Breeders (now owned by Dekalb Swine Breeders).

**Lubbock**

The Lubbock System places weaned sows in crates with a boar placed in a pen directly behind them. Usually one boar is housed behind five or six sows. The boar pen is used not only to house the boar but for breeding. Females are backed into the breeding pen when estrus is detected. Generally all five sows are not from the same weaning group. This prevents the boar from being over-used.

Advantages of the system include:
- Relatively easy animal movement.

Disadvantages of the system include:
- Sows are continuously exposed to boar stimuli making detection more difficult;
- Breeding floors could be slick since boars are housed in the breeding pens and the floor must serve a waste management as well as a breeding function;
- Excessive space is required for breeding/boar pens, therefore it may be more expensive;
- It is difficult to breed sows to a boar other than the one that is housed in the same cell;
- Sows must be backed out of crates making workers vulnerable;
- Conversions to AI may be difficult due to breeding pens arrangements and space requirements.

**Modified Lubbock System**

The Modified Lubbock System houses weaned sows, boars and developing gilts in one cell. Five sow stalls are placed with the breeding pen behind them. Boar stalls are placed next to the breeding pen with gilts across the alley. Sows may be either backed into the breeding pen or moved around the outside of the cell.

Advantages of this system include:
- Relatively easy animal movement;
- Any sow can be bred to any boar without major movement.

Disadvantages of this system include:
- Sows are continuously exposed to boar stimulus, thereby making detection more difficult;
- Gilt pens are only 7 ft by 10 ft which limits the number to 5 gilts;
- Boars stalls are only 7 feet long and should be longer for large boars.

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Figure 1 The Lubbock System.

Figure 2 The Modified Lubbock System.