Death of baby pigs represents one of the most serious losses in the swine industry. There are several reasons for these losses, the most common ones being crushing by the sow and chilling. Nervous sows—especially first litter gilts—tend to be up and down more during the farrowing process, wetting their bedding more. Such conditions are ideal for chilling and crushing of baby pigs. Many workable devices, termed "farrowing crates" or "farrowing stalls" have been designed to minimize these losses, but the complexity of construction details of some models and the reluctance of swine growers to modify their farrowing setup have held up universal acceptance.

Trial of three different farrowing stall arrangements at Oregon State College has resulted in a simple, workable model. It consists of two partitions wide enough apart to confine the sow comfortably, yet narrow enough to compel her to lie on her underside before rolling into position for her pigs to nurse. The bottom of the partitions are open so baby pigs can move about freely. Heat lamps suspended in the center of the area outside each partition attract baby pigs from underneath the sow when they are not nursing (see picture).
Construction

Farrowing stalls may be separate units, movable from place to place, or they may be built permanently into a regular pen as shown. Construction details are shown in the plans, pages 3 and 4.

Heat is provided the two litters by suspending a 250-watt infrared heat lamp directly over the dividing board. This lamp is 9 inches above the board and 21 inches above the floor. Additional heat may be provided by placing heat lamps above the two outside portions of the farrowing stalls. These will provide sources of warmth to newborn pigs during the farrowing process, regardless of the side on which the sow is lying. These lamps may be suspended in the center of the 12-inch areas.

Precautions

Here are several precautions for installing heat lamps:

1. The circuit serving the heat lamp must be of adequate capacity and permanently installed. For a farrowing house, use acid resistant, non-metallic sheathed cable, number 12 wire. Limit this circuit to not more than seven 250-watt heat lamps, and protect the circuit by a 20-ampere fuse or circuit breaker.
2. Use an asbestos-insulated appliance cord (type HSJ). Use number 18 wire for one 250-watt lamp, number 16 for four lamps, and number 14 for six lamps. Limit length of cord to 8 feet. Insulate the exposed rubber covering with insulation tape where the asbestos is removed.
3. Suspend the lamp unit by chain, wire, or bracket at least 18 inches from litter.
4. Use a porcelain or heat-resistant switchless socket. Plastic, brass, and rubber are not satisfactory.
5. Heat lamps should be protected by a nonremovable guard. This protects them from mechanical injury and, if one should drop, the lamp will roll over directing its heat rays upward.
6. Do not place the cord where the sow or pigs can chew on it.

Place sow or gilts in the stalls a day or two before farrowing is expected. They may be fed and watered regularly while confined in the stall. Provide daily exercise for 10 to 15 minutes. Twice daily is best. Then you can clean and bed the stall. Usually there is no difficulty in returning the sow to the stall, but drive gently and quietly.

Length of confinement to the stall will depend upon immediate need for the stall by another sow, birth weight and vigor of the pigs, and temperament of the sow. The critical period for crushing of baby pigs is considered to be the first 2 days after birth. You, therefore, can remove the sow and her litter to a regular farrowing pen 2 days after farrowing. In one trial at Oregon State College a sow and her litter were confined to a farrowing stall for 3 weeks with no harmful effects, by allowing the sow outside exercise twice daily. Among 10 litters farrowed in such a device, no pigs were crushed while the sow was confined to the farrowing stall.

Advantages

Some advantages noted in the use of farrowing stalls at Oregon State College were:

1. Crushing during farrowing is practically eliminated.
2. Less chilling occurs, since the restricted space cuts down drafts, and the distance the newborn pigs must travel to get to a warm spot is greatly reduced.
3. Less wet bedding occurs since the sow eliminates only in one spot.
4. The sow and newborn pigs are easier to handle during farrowing, and the difficulties of attending the farrowing of cantankerous sows are greatly reduced. Sows so confined settle down quickly and complete the farrowing process more promptly than those allowed more freedom in an ordinary farrowing pen.
2x4 - 250 WATT HEAT RAY LAMPS WITH NON-REMOVABLE GUARDS

3\" X 4\" MACH BOLT WITH WING NUT

PLAN VIEW

END VIEW

3\" BARREL BOLTS

SIDE ELEVATION

4\" T-HINGES

SCALE = 12