
K**LOW INVESTMENT FARROWING FACILITIES****S****J.P. Murphy¹****U**

Low investment farrowing facilities can be divided into three categories, depending on the level of investment.

At the lowest investment level, an individual farrowing shelter that has no floor is utilized. The shelter can be as simple as two sheets of plywood nailed together to create an A frame. Sometimes, rounded "quonset" shelters also are utilized. Since the weather protection is somewhat limited, these types of shelters are normally used to farrow only in the spring and fall. This is sometimes called the two-litter system. Farrowing is normally done on pastures. The shelters utilize no supplemental heat and have no permanent water supply. The shelters are moved each time they are used. Since farrowing is planned during mild weather, shelters are not insulated and are intended mainly to keep the sow and litter dry.

Normally, one-half bale of shavings or straw is utilized prior to farrowing. During normal weather conditions, bedding is used at the rate of one bale per week for 5 wk. Bedding usage is highly variable, depending on weather conditions. Some pastures are corrugated or terraced prior to planting grass. The individual shelters are then located on top of the terraces to obtain adequate drainage during wet conditions. Terraces are normally spaced about 80 ft apart.

If the shelters are utilized twice a year, the majority of the pigs will be sold twice a year. This "seasonal marketing" could be a disadvantage, in that you will only have two times during the year to average for a market price. Some producers utilize the shelters to farrow two sows per season for a total of four litters per shelter per year.

Investment in this type of individual shelter can be as little as 100 dollars each. When additional fencing, water supply equipment, and some kind of mechanized hauling of feed, bedding, and equipment to the shelters are considered, the investment is about \$250 per sow.

At the next higher investment level is the individual farrowing shelter, which is permanently located. This type of shelter sometimes farrows two sows under one shelter. A shelter normally has a wood floor and minimal insulation. Usually, in front of the shelter is a 6 x 10 ft concrete slab with a permanent fence. At the lower end of the pen, a permanent waterer provides water for two pens. The shelter is large enough so that there is a door and a minimum amount of room for a swine manager to enter the shelter and still be protected from the sow. Electricity is supplied through the rear of the shelter to operate heat lamps or mats. By utilizing the heat lamps and the hovers, year around production can be obtained with the shelters. If fiberglass heating mats are not utilized under the hover, some bedding may be required for small pigs. In front of the shelter, manure is normally scraped from the pen three times per week. The manure is then hand loaded into a manure spreader or loaded with a front end loader for disposal. If no nursery exists, these types of farrowing units are utilized once every 2 mo for farrowing. Some units utilize a shed, which covers the shelter and the outside pen. This shed is normally closed on three sides and left open to the south.

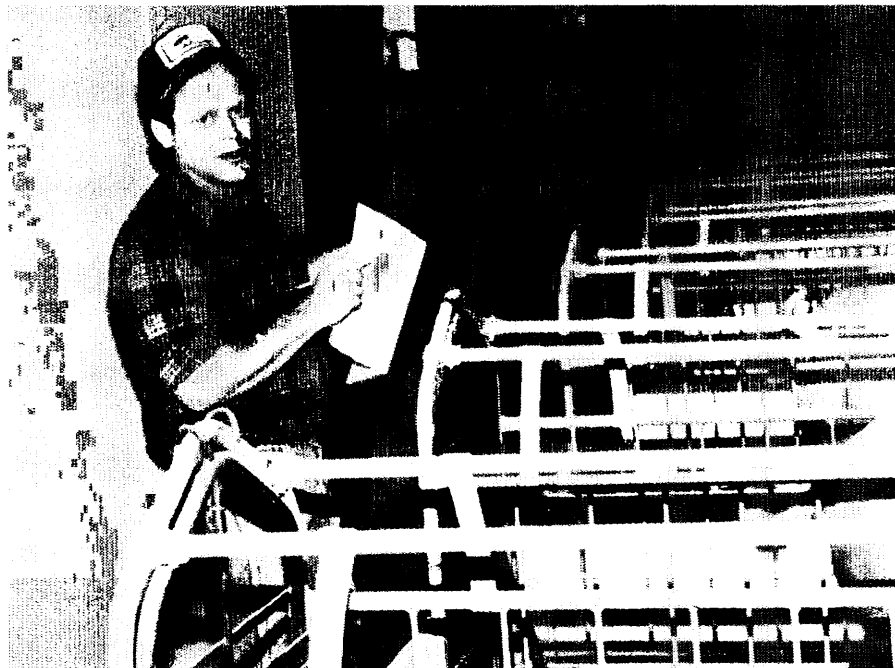
¹Extension Agricultural Engineering, KSU.

Investment in this type of facility would average \$700 to \$1200 per sow. Minimum equipment is utilized in this type of unit. Sows are fed usually by hand carrying feed, which is dumped on the outside slab.

The last category is group farrowing. This type of farrowing can occur in a remodeled barn or a newly constructed facility. This facility would use a small fan for winter ventilation but would open up doors and windows for summer ventilation. The building would be insulated and supplemental heat would be provided for year around use. Normally, no bedding is used in the farrowing crates or pens. Some units would have elevated floors and manure would be removed by hand scraping. The wastes from the building could be handled as a liquid and could flow to a lagoon. Investment in this type of unit would vary from \$900 to \$1,500 per crate.

The success of low investment farrowing facilities depends on climate, topography of the land, farrowing shelters and pens, feeding, water and bedding systems, and of course, management. Since capital expenditure is limited in the shelters, the sow's and baby pig's environment will depend on the mothering ability of the sow, the available bedding materials, and the shelter. The lowest investment farrowing facilities require managers that can plan for adverse weather conditions and be ready and able to provide suitable farrowing conditions for their sows.

(Key Words: Farrowing, Facilities, Low Investment.)



Jim Vawter, animal caretaker, records data in the K-State farrowing house.