

## Stockmanship

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Authors  
Peter J. Lammers  
David R. Stender  
Mark S. Honeyman

Pig handling and care affects productivity. The buildings and facilities commonly used by niche pork producers may not allow close regulation of environment and pigs. Rather, these systems rely on the adaptability of the pig and the skill of the stockperson to accurately read pig behavior.

Bedding plays a critical role in pig comfort in most niche production systems and is addressed in leaflet number 230 of this handbook. Pig housing and handling facilities should be designed to complement pig behavior. Adapting facilities and stockperson attitude to match the natural behavior of pigs is advantageous, particularly in the areas of mating sows, farrowing litters, and sorting or moving of market pigs. If a task is too difficult or distasteful for stockperson or pig, the task may not be performed well over the long-term.

### Mating and Breeding

Sows and boars can easily harm stockpersons. Sows and boars must be respected, but should not be feared by or taught to be fearful of humans. Flight zone is the space that a pig will attempt to maintain between itself and a person. In sows and boars, the flight zone should be zero. Both animal and stockperson must be comfortable in close proximity with each other. Reproductive performance is superior on farms where the sows are not afraid of their caretakers. Calm behavior by the stockperson will translate into calm behavior by the pigs. Sudden movements and loud noises should be avoided.

### Farrowing

Farrowings should be attended by stockpersons to insure maximum survival of

newborn pigs. The entire birth process will last between two and five hours. Time between the births of individual pigs will range from few minutes to one hour.

In most cases pigs are born with no assistance from stockpersons.

Newborn pig care consists of three considerations:

#### 1) Breathe

Check newborn pig for breathing. If pig is not breathing, wrap hand around pig's muzzle to form a cone and gently force air into the lungs. Expel air from lungs by squeezing rib cage. Repeat.

#### 2) Nurse

Piglets should ingest colostrum moments after birth. Colostrum is rich in energy and disease fighting antibodies. Help pigs find a working teat as soon as they are born.

#### 3) Prevent Chills

The newborn pig has almost no fat to insulate against cold or drafts. Pigs should be dried and placed at the sow's udder immediately after birth. Positioning heat lamps or pads to provide supplemental heat is desirable, but caution needs to be taken to avoid fire hazards.

A goal should be to provide minimal assistance at farrowing. However, stockpersons should be prepared to assist. Sows may tire giving birth to large pigs or litters. If labor (nesting, restlessness, abundant milk, straining) is observed but no pigs born within 1 hour, or if 20 minutes pass between births, the sow should be examined and assistance provided.

Oxytocin is a naturally occurring hormone which stimulates uterine contractions and milk letdown. Injectable

forms of oxytocin are available for use in pigs. Consult your veterinarian for proper use of this hormone. Before using any substance be sure to confirm that it is acceptable to your niche market.

### **Manual Delivery Technique**

- ◆ Thoroughly wash hands, arms, and the sow's vulva area with warm water and antiseptic soap.
- ◆ Plastic sleeves are available and are recommended. Insert arm into plastic sleeve and thoroughly wash sleeved arm.
- ◆ Apply lubricant liberally to sleeved arm and hand.
- ◆ Gently insert cupped hand and forearm through the sow's vulva and determine how the pig is presented.

Head first delivery: Normal delivery position

- ◆ Grasp the ridge of the nose with your thumb and insert your index finger in mouth behind the needle teeth, pinch thumb and index finger together and gently pull.
- ◆ Grasping the pig by placing your thumb under the chin and index finger in its mouth is also effective.
- ◆ If the sow's pelvis is large enough and her uterus is well dilated, you may be able to pass your hand over the pig's head. Place your index and middle fingers behind the pig's ears and press your thumb against the lower jaw.

Breach delivery: Pig's rump is over rim of sow's pelvis and pig's hocks and legs are forward.

- ◆ Gently slide cupped hand through the vulva and vagina until contacting a pig.
- ◆ Gently hook fingers around the pig's hocks and simultaneously push the pig's rump and pelvis forward with your thumb.
- ◆ This action will allow you to pull the back legs and to deliver the pig.

Do not force your arm too far into the reproductive tract or damage to sensitive tissue may occur. Be patient and gentle when assisting with delivery. Young pigs easily can be injured or the sow's reproductive tract damaged if care is not taken. Delivery instruments should be used with caution. Timely delivery is essential because one or more viable pigs could die due to farrowing complications. If pigs begin to decompose within the sow, they will poison the sow. The placenta usually is expelled from the sow within four hours of the last pig birth and is a good signal that delivery is complete. Sows will eat fresh placenta and make it difficult for a producer to know whether the placenta was passed.

### **Lactation**

Nursing follows a consistent cyclic pattern in pigs. Approximately every hour either the sow or pigs will initiate nursing. The sow will roll on her side and expose her udder, accompanied by slow grunting which calls the entire litter of pigs. The piglets will assemble at the udder and begin to aggressively nose and butt the udder. The sow will grunt faster and louder and the pigs will begin to suckle. Only after all pigs have established their position and stopped squealing will milk be released by the sow. Milk flow lasts about 15 seconds followed by swallowing and noisy suckling by the pigs. Once the released milk has been drained from the teats, the pigs begin to butt the udder again, but the sow terminates nursing by rolling onto her udder.

Teat order is established within the first three days and piglets will defend their teat at the udder. Milk flow is stimulated by suckling, thus unused sections will regress. The cyclic nature and short duration of nursing in pigs makes it particularly important for teat order to be established and maintained. Fans or other noises in the farrowing house can disrupt nursing cycles

and cause some pigs to miss a meal. Pigs that miss a nursing cycle are not fed until the next nursing bout. Nursing in a group lactation room is usually synchronized, thus preventing pigs from one litter stealing the milk from another.

Lactating sows consume large amounts of water. Clean and fresh water should always be available. When pigs are 3-7 days old they will begin to drink water. Be sure to provide a way for the young pig to consume water while it is still nursing.

### **Weaning**

Most niche markets require a weaning age of 35 days or older. This is an advantage for the newly weaned pigs. Weaning is one of the most stressful times for mammals.

The young abruptly must shift from a diet of milk to a diet of feed. This transition can be eased by creep feeding. Weaning older pigs also allows the gut time to mature and become better able to digest the nutrients found in typical pig diets. Making sure that newly weaned pigs find and consume water and feed is the key task for the stockperson during this phase.

When weaning, the sow should be removed from the pigs. Ideally a group of pigs that were born at the same time will be weaned at the same time and become a group of market pigs. If groups of growing pigs need to be mixed, weaning is the best time to do so.

### **Market Pigs**

After pigs have been weaned and have established eating patterns it may be tempting to place the animals on a self-feeder and ignore them until it is time to market them. This is not good stockmanship. Pens of growing pigs and particularly their waterers and feeders should be checked daily. Pigs should be observed for normal behavior and sick or injured animals treated immediately. A pen or lot designated for

sick animals should be maintained for animals needing treatment. If observation of all pigs in a pen is possible without entering the pen, stockpersons should walk through the pen weekly to familiarize the pigs with their presence. When checking pigs, take note of the following:

- ◆ Are the animals crowding into a corner, or spread out and calm?
- ◆ Are any animals breathing heavily or coughing?
- ◆ Are stress behaviors such as tail-biting occurring?
- ◆ Has the dunging area shifted or grown in size? If so, is this because of a draft, overcrowding, too little fresh bedding, or some other cause?

When sorting and loading pigs, workers should remain calm and avoid making loud noises and sudden movements. Electric prods are prohibited by many niche markets. Hog paddles and whips should be used with care to avoid injuring the pig or bruising the carcass. Solid panels should be used to direct pig movement. Pigs prefer to move in groups, so sorting multiple animals at once may be less stressful for both pig and worker. During hot weather, pigs should be moved and handled in the cool part of the day. Sprinkling pigs in transit can relieve heat stress.

### **Additional Resources**

Anonymous. 2007. See what you feel—  
assisted delivery of piglets. GSW 07002.  
National Hog Farmer and Purdue  
University.

Kyriazakis, Ilias and Colin T. Whittemore  
editors. 2006. Whittemore's Science and  
Practice of Pig Production 3<sup>rd</sup> Edition.  
Blackwell Publishing. Ames, IA.

National Pork Board. 2007. Pork Quality  
Assurance Plus<sup>TM</sup> Producer Certification  
Manual. Available at  
<http://www.pork.org/Producers/PQA/PQAPlus.aspx>.

U.S. Pork Information Gateway  
<http://pork.porkgateway.org/web/guest/home>