

Barns, Stalls, and Three-Sided Sheds: Small Ruminants and Swine

Our topics for this week are:

- Safe, effective shelters for sheep, goats, and South American camelids
- Humane shelters for swine

Small Ruminants

Goats have a strong dislike of rain and mud. If not given a means of avoiding both, their attempts to escape will be greater. Goat sheds can be a 3-sided walk-in shed that is on runners so it can be moved like a sled. The walk-in shed should provide at least 15 square ft of space per goat. Sheds should be located with the opening away from the prevailing wind and in a well-drained area. Mature buck goats during rutting season should be kept in individual pens with an aisle between other bucks.

Ewes and does will often allow their desire to be with a herd to override their need to stay with their newborn lamb or kid. Small stalls called *lambing jugs* (or claiming pens) are beneficial for ewes after they have lambed to bond with their newborn lambs in a safe, clean, and dry area for 1 to 3 days before rejoining the flock. Pens for does and kids are called *kidding pens*. Strangers and dogs should not be permitted near a lambing jug or kidding pen to prevent unnecessary stress to the mothers. Jugs or pens can also be used as a hospital stall, if carefully cleaned and disinfected after use. They should be 4 by 6 ft, or larger, depending on the size of the breed.

Walk-in sheds are adequate shelter for South American camelids unless the weather is extreme. Although they originate from the Andes Mountains, the winter weather is moderated in the Andes by the proximity to the equator. Therefore, South American camelids are not capable of tolerating extreme cold and need more complete shelter than a 3-sided shed when the temperature is less than 15°F.

Swine

Housing for swine to be kept exclusively indoors on concrete is designed nearly exclusively for efficiency of production. Containment that provides greater environmental diversity for mental stimulation, socialization with other hogs, and relief from standing and laying on concrete better meets the criteria for desirable containment of all species.

Lameness is common in stall confined sows on concrete due to lack of movement to nourish joints, inability to maintain muscular tone, and an inability of handlers to monitor their ability to move. In Europe, sows are more commonly *loose housed*, i.e. group housed in herds of 30 to 40 hogs per pen, and then fed individually in feeding stalls to prevent fighting over food. Straw bedding is provided for hogs to root and chew. Branches and logs may also be included in pens. Lameness, abrasions, and stereotypic behaviors are less common than in intensive indoor confinement operations. Intensive confinement in gestation stalls have been promoted to decrease interaggression among sows by physical separation, but the use of gestation stalls has also prevented selective breeding against aggressive sows.

The best temperature range for swine is 55 to 85°F. Hogs do not sweat or pant efficiently to dissipate overheating. They must cool themselves by wallowing in mud or with misting fans. However, they also need to stay dry when sleeping, be able to stay out of drafts, and get away from the mud when eating and other times when desired. Hogs raised outdoors must have sufficient pasture to have access to mud and to get away from it, or if in a smaller area, they need slatted wood platforms to escape the mud when needed. Hogs on dirt, but without a pond, will root to create a wallow if their snouts are not ringed. Hog-made wallows can be a source of infection and difficult to manage. Man-made wallows are shallow pools in which hogs can wade, wallow, and cool themselves. The pools are constructed of metal, concrete, or pressure treated pine. Dry lots for hogs should be sloping to prevent them from becoming exclusively mud lots during rainy seasons. Swine must always have access to shade.

A range hog house is a 3-sided walk-in shed that is on runners so that it can be moved like a sled. Usually there is no floor. Straw bedding is usually provided although, in some areas, peanut hulls or wood shavings may be preferred. To provide better wind shelter, the hog house should be 8 ft wide and 16 ft long with a roof that slopes from the entrance toward the back. At the highest point, the entrance, the roof should be 5 ft above the runners. The entrance should face the east or south, opposite the prevailing winds. A-frame houses may be used, but these allow poor access by handlers. Hog houses should be firmly fixed to the ground when in use or reinforced by a low strand of electric wire to prevent hogs from rooting under an edge and lifting the structure.

If sows are in close confinement, farrowing crates are intended to reduce the risk of piglets being crushed or smothered by the sow. Sows are usually put in farrowing crates 1 week prior to farrowing until 3 to 4 weeks after farrowing. The basic crate is 5 ft wide and 7 ft long. The middle space for the sow is 2 ft wide and 7 ft long with an 8 to 10 inch space between the bottom of the inner side panels and the floor to permit piglet escape from being crushed by the sow. Other operations use pens at least 6 X 8 ft with guardrails around the edge 6 inches from the wall and 8 inches from the floor to provide a shelter for piglets to avoid being crushed. A creep area is also provided in one corner to provide additional heat to the piglets. Huts in pastures are an alternative to farrowing crates, but some handlers argue that domestic sows are larger and less nimble than feral sows and crushing is still a problem.

New gilts being added to an established group of sows should be watched for several hours because of the possibility of territorial aggression by the sows. It is safer to bring sows into a gilt pen rather than gilts into a sow pen for first introductions. Spraying sows and gilts with the same odor can help with introductions. Another option is to put them all together in a large pen with extra options for sleeping sheds. Individual feeding should be done in feeding stalls 24 inches wide by 72 inches deep.

Boars should be kept in pens where they can see and touch noses with sows to socialize the boar and reduce the risk of fighting when the boar is put in the breeding pen.

Gates in hog pens should be opened for moving hogs in and out. Handlers entering a pen should climb over since hogs can escape with speed and force if the gate is unlatched for a handler to enter. Handlers should step or climb over hog pen fences.

Now, let's recap the key points to remember from today's episode:

- **Ewes and doe goats should be penned with their newborns for a few days to**

- **enhance maternal bonding**
Loose housing with straw bedding for containment is associated with less lameness, abrasions, and stereotypic behaviors in swine than total indoor confinement on concrete.

Abby says it is time to wrap up this episode.

More information on animal handling is available in my book, *Animal Handling and Physical Restraint* published by CRC Press. It is also available on Amazon and from many other fine book supply sources.

Additional information is available at www.betteranimalhandling.com

Don't forget serious injury or death can result from handling and restraining some animals. Safe and effective handling and restraint requires experience and continual practice. Acquisition of the needed skills should be under the supervision of an experienced animal handler.