

Good Calving Facilities Reduce Stress & Calf losses

Calving facilities can be a vital part of a cow-calf operation since they provide a managed area for calving. This enables producers to easily recognize cows having difficulty calving and provide timely assistance without having to search large acreage.

Good facilities should increase profits due to lower death losses, minimize cow stress during the calving season, reduce labor requirements and allow for easy assistance during calving.

The calving facility is divided into four areas: observation pen, maternity pen, treatment center and cow-calf pen.

Observation Pen

The observation pen is a loose housing pen located near the maternity pens. As long as there are no difficulties during the calving process, the cows calf in this pen. The pen size is based on providing a minimum area of 1,000 square feet per cow. Fenceline bunks or hay racks should be provided for feeding.

A windbreak is normally all the shelter provided for the observation pen. Some operations utilize an open shed to provide protection against rain or snow.

Producers also install headgates in the fence to aid with artificial insemination. A 16-foot concrete apron should be poured at the headgate to provide firm footing and better working conditions.

Cows are moved into the observation pen one to two weeks before calving. The

pen should be large enough to handle the maximum number of cows expected to calf during any two-week period. Pen capacity should be limited to 40 cows per pen. Larger herds may need to use a nearby pasture as a first stage observation pen before moving the cows into the smaller observation pen four to five days before expected calving.

Maternity Pens

The second area of a calving facility is comprised of the maternity pens. These pens are contained in a building and each pen houses one cow. Maternity pens are generally reserved for heifers or cows expected to have difficult calving.

A cow is held in a maternity pen two to three days. As a rule of thumb, if calving occurs between April and October, the number of maternity pens is five percent of the total number to calf or 10 percent of the maximum weekly number to calf.

Calving expected to occur between November and March should have enough pens to handle 10 percent of the expectant cows, or 15 percent of the maximum weekly number.

Each maternity pen has one side at least 12 feet in length with the other side varying from 10 to 14 feet. An ideal pen is 12 x 12 feet. The minimum size is 10 x 10 foot. Other common sizes include 10 x 12 foot, 12 x 14 foot, or 14 x 14 foot. There should be at least a 2-foot clearance around an animal when laying down.

Most maternity pens will have three solid sides. Sides should have movable interchangeable gates and side walls. This makes a pen easier to clean and provides access to help a downed animal. Maternity pens should always be constructed to allow a mechanical method, such as tractor with front end bucket or skid-steerer, to be used to assist with a downed animal.

Provisions for watering and feeding also need to be considered when constructing maternity pens. Two common options for feeding include a 3- to 4-foot wide alley along one end of the pens, or a drive-through alley. Some producers provide a creep area in one corner of each pen where additional heat can be provided to the newborn calf.

Maternity buildings can either be an

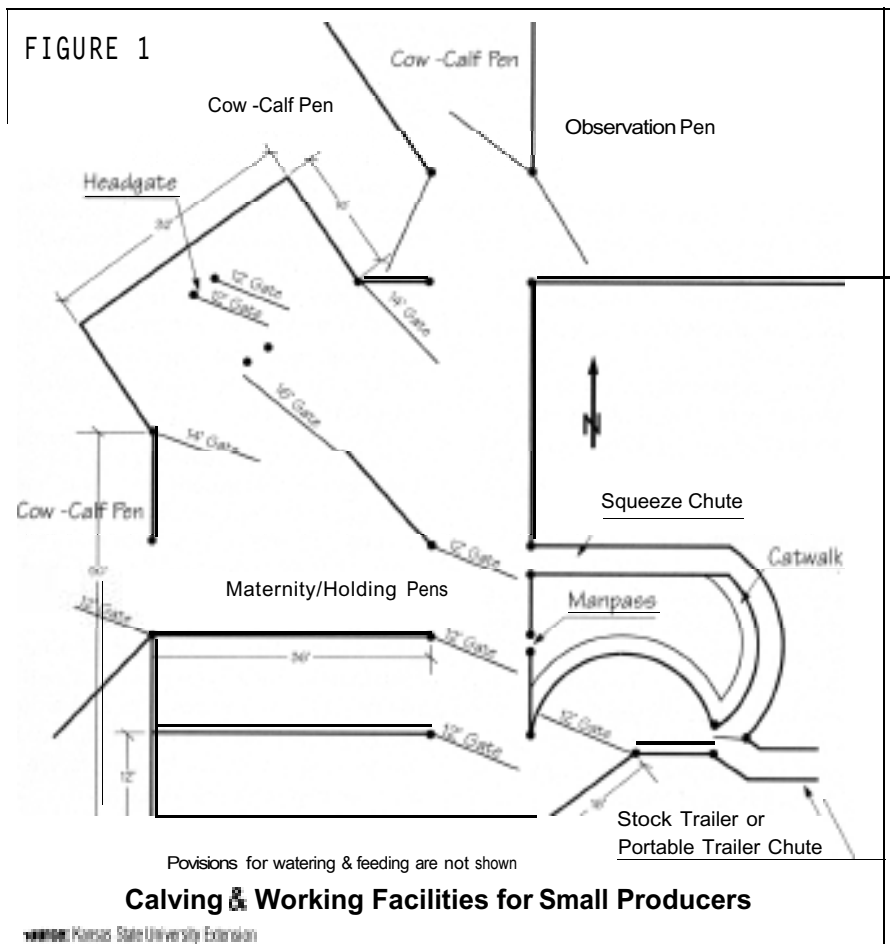
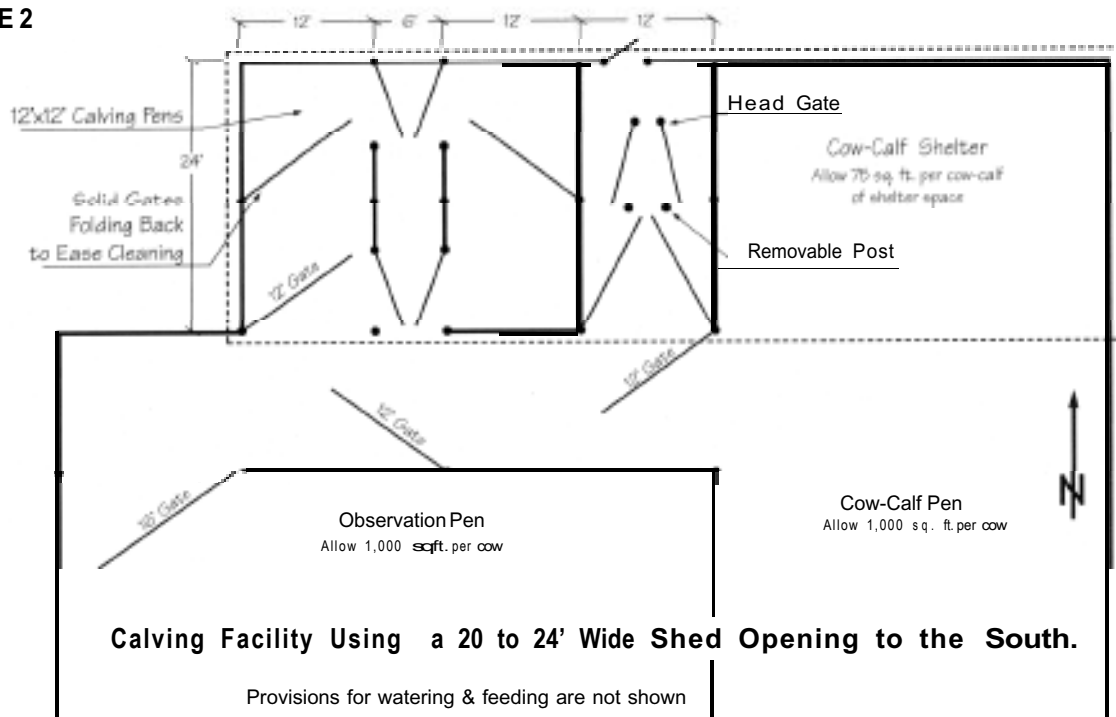


FIGURE 2



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open-front shed or an enclosed building. The main purposes of the building are to provide a dry area for calving and protection from the wind. Proper ventilation is critical to ensure excessive heat and moisture are removed to reduce the risk of sickness. Uninsulated buildings which are tightly constructed may cause more problems than they solve since moisture condensation will lead to sickness and herd health problems such as pneumonia.

Treatment Center

The treatment center is the third critical area of good calving facilities. This area is used to assist cows or heifers with calving. The primary components include a headgate or catch gate and break-away gates along either side of the headgate. The break-away gates can either be bifold or single gates. A gate's minimum length is 8 feet.

The gates should be mounted to have a closed position of 30 to 36 inches apart in order to confine a cow. The gates should be mounted on the front post which supports the headgate. The rear post should be removable to provide an unobstructed work area particularly if a Caesarean is required.

Some producers choose to have the treatment center in a totally enclosed area with minimum heat being available.

Normal space required is at least 16 x 16 foot with a minimum of a 4-foot clearance around all sides of an animal

when laying down. The treatment center needs to have adequate lighting and water nearby. Normally, it is located at one end of the maternity building to be readily accessible to a veterinary truck.

Cow-Calf Pen

The fourth area is the cow-calf pen. A cow-calf pair is moved into this pen within 24 hours after birthing. The purpose of this pen is for observation of the cow and calf to monitor post-calving progression. The calf can also easily be removed for administering vaccinations or other shots.

This pen is normally near the observation pen and is similarly sized. Recommended space is 1,000 square feet per cow-calf pair. A pair may remain in this pen one to two weeks after calving.

Other Considerations

Some general requirements of a calving facility include all-weather roads and accessibility, provisions for watering and feeding, protection from the wind, and adequate drainage. The degree of protection (windbreak/open front vs. closed buildings) will depend on the expected weather at time of calving.

The facility should be located a minimum of 200 feet from any streams, creeks, rivers, or major water channels. All of the extraneous drainage should be diverted away from the facilities. It may be necessary to elevate the site 12 inches to improve drainage.

Minimum electrical requirements include one 20-A, 120-V duplex outlet, two to four 150-watt incandescent bulbs and a dusk-to-dawn light. Provisions for supplemental heat using creepers or heat lamps should be considered particularly for winter calving.

The floor of the maternity pens should be compacted clay and adequate bedding used, if necessary. The area around the treatment center should be a "diamond" grooved concrete surface. This surface will aid cleaning and ensure proper footing if deep grooves are provided. The treatment center and maternity pens must be tractor/loader accessible to help down animals.

Some facilities may include a separate sanitation room for cleaning purposes. This room would include a deep sink, hot water tank, heater, cleanable table or counter, refrigerator for medications and other calving equipment. An 8x10 foot or 10x10 foot room should be adequate for a sanitation room.

Figure 2 shows an arrangement of an open front building (open to south or east) which is 20 to 24 feet wide. One end of the building is used to house the calving pens and treatment area. The building can be extended to provide shelter for the observation and/or cow/calf pen. Fenceline feeding facilities would be located in the east and west fencelines.

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