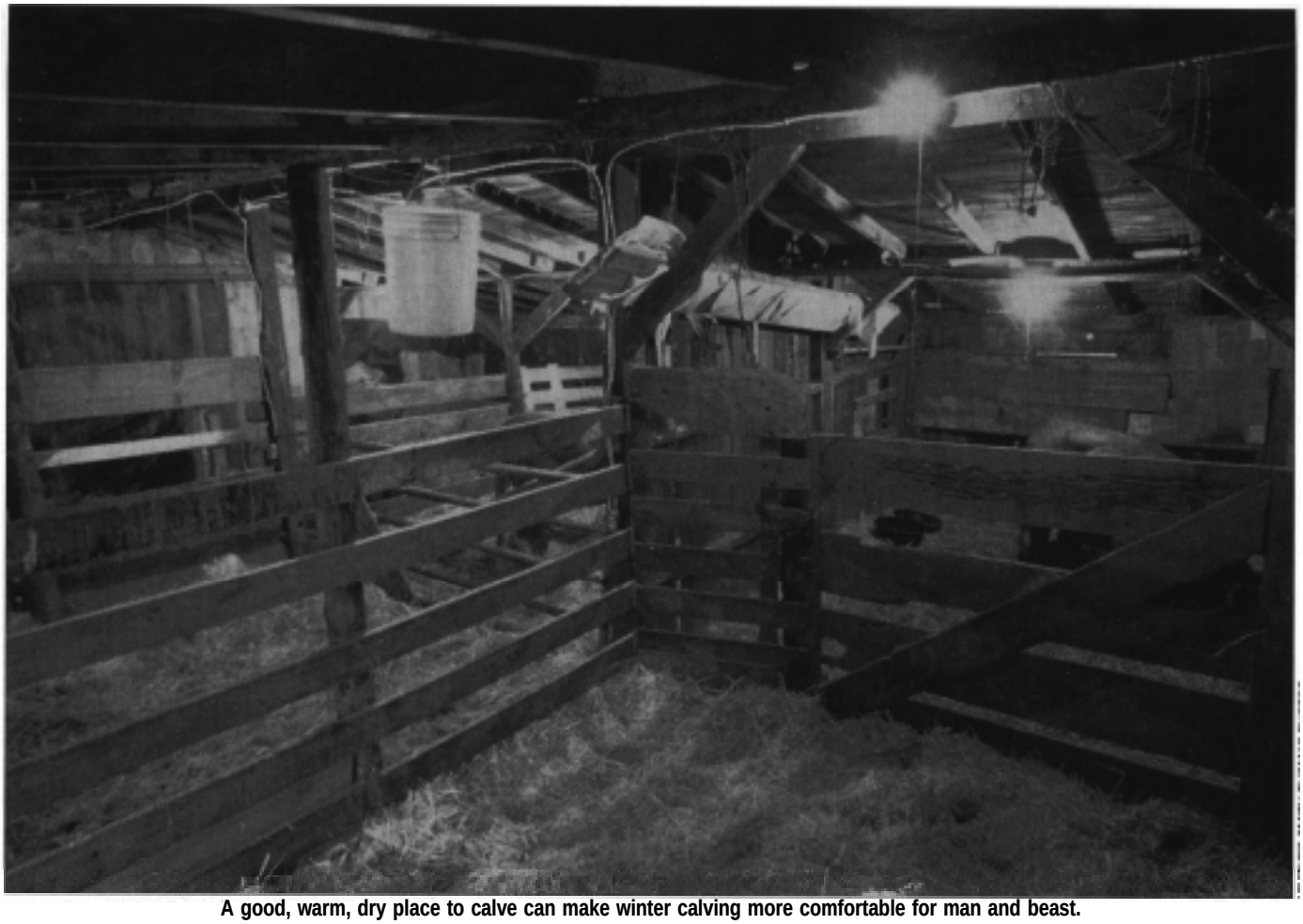

A good, warm, dry place to calve can make winter calving more comfortable for man and beast.

Facilitate Calving

Here are seven producer-proven facility ideas to ease winter calving.

BY HEATHER SMITH THOMAS

Calving in winter or early spring necessitates shelter for calving cows, pairs and young calves. Even when calving in late spring, it's nice to have a place to work with a cow if she's calving in a downpour of rain. Also, if you have to help a cow for any reason — even in good weather-you need a way to confine her to make the job safer and easier.

Calving barns

There are about as many ideas for calving barns as there are ranchers. You can get innovative and helpful hints from many sources to help create or improve your own facilities to fit your situation.

Dick and Judy Lorenz use a 12-stall barn on the Flying Diamond Ranch near Saratoga, Wyo., keeping calving cows and heifers nearby (300 Angus females). They built the 40x84-foot (ft.) pole barn in 1991, digging a foundation trench in which to set a treated 6x6-inch (in.) horizontal beam. Large, upright poles are anchored to the beam with aluminum plates. They backfilled the trench with coarse gravel.

The structure is a wood-framed pole barn with metal outside walls. It contains an observation room complete with rest room, recliner for sleeping, and easy access to the hospital room, which has a cement floor and drains. This, along with good lighting, insulation, heat and running water (hot and cold) make dealing with calving problems a lot easier. The chute for checking or restraining a cow to assist a birth is easily accessed and cows go into it readily. One person can put a cow in with ease.

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Bruce McDougall calves out 400 head on his 2,000-acre McDougall Cattle Station near Breton in west-central Alberta, Canada. He uses

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cross-fenced brush pastures with sheltered draws, rotating the cows through a series of pens and pastures before and after calving to reduce crowding, contamination and disease.

McDougall has four large pens close to his calving barn and keeps cows with new calves separate from the rest of the herd. He puts first-calf heifers and their newborns in another pen until he's sure they are mothered up. Then they go to the sheltered brush pastures.

His barn is 60x100-ft., with living quarters and office at one end and a ventilated, heated calving area at the other. The 12-in.-thick walls are tilled with fiberglass insulation. Inside are posts and moveable panels so the stall layout can be altered as necessary.

The barn has three large exhaust fans and several gas heaters, but rarely needs the extra heat. McDougall likes to keep the temperature right at freezing. The ventilation pushes the moist warm air outside and keeps the barn dry — lessening the risk of pneumonia in calves.

Jim Grills created an inexpensive calving barn for his 100-cow ranch near Rocky Mountain House, Alberta, by remodeling a 20-year-old

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pole hay shed. He took the roof off in pieces and sawed the 20-ft.-tall support poles off at a height of 8 ft. He used two 2x8-in. timbers for beams across poles spaced at 12 ft. to hold the 28x72-ft. roof.

He insulated the roof by first putting down chipboard sheets strapped with 2x4s. Then he unrolled a sheet of plastic over the chipboard, spread wood shavings over the plastic, and covered the top with metal sheeting.

For the walls, Grills used a 4-ft.-high plank wall in front, with a 3-ft. opening above it for ventilation. The walls are sandwich construction — made of chipboard sheets on a 2x4 framework, filled with shavings and covered on the outside with rough-cut wood slabs to protect the chipboard from weather or cows rubbing on the barn. If weather turns cold, they lower a plastic sheet over the 3-ft. opening across the front.

Michael and Carolyn Thomas, a young couple from Arco, Idaho, who are just getting started raising cattle, made a fast and functional

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calving barn last year. They used tall posts set deep in the ground to support pole rafters for a metal roof. The walls were made of small straw bales stacked up to the roof. Pole panels on the inside keep cows from eating the walls. The straw makes an inexpensive wall that provides excellent insulation against wind and cold.

The front of the barn is enclosed with panels. A durable tarp can be rolled down to keep out the wind and cold or rolled up during nice days.

Michael and Carolyn didn't have the time or money to build a fancy barn, and their cows were due to start calving very soon. They created this "instant" barn in just a few days. It sheltered their calving cows through a very cold February and March, during which temperatures dipped to -25°F.

The key to successful barn calving is to keep barns clean and dry to prevent infection and illness.

Windbreaks in small second-day pens (used after pairs come out of the calving barn, but before they go out on range) protect newborns from weather and cold stress.

D. McCARTNEY PHOTO

This pole shed provides very inexpensive, but durable protection. Walls can be made of lumber, boards, plywood or chipboard sheets covered on the outside with sheet metal for weather protection. Or, for temporary walls, use straw bales.

Canada Agriculture Research Station at Melfort, Saskatchewan, offers plans and designs for calving shelters, including a portable shed they have used at the station for more than 20 years. The portable sheds are made with welded pipe for the frame (using 2 1/2 in. steel pipe or 2 1/4-in. drill-stem pipe). The skids could be made from 2x8s, logs, or rough-cut lumber, and 2x6s are used for the uprights.

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The portable shed can have either two or three stalls, each with a built-in pipe-frame headcatch (dairy stanchion) and a crowding gate to put the cow into the headcatch.

A heat lamp is situated in the corner of each stall, behind a protective barrier so it can't be bumped by a cow or calf. Propane heaters can be used if there is no available electricity,

The top part of the door to each stall can be swung up in mild weather to let in sunshine. The bottom part opens when calving stalls are no longer needed, allowing calves to use the facility as a shelter and/or calf creep.

Situating two sheds face-to-face forms a small barn with an alleyway between the two sides. The portable calving sheds can be moved to provide clean calving areas. For a free copy of the design, and other calving facility plans, contact Duane McCartney, Agriculture and Agri-Food Canada Research Station, Lacombe, Alberta, at (403) 782-8104 or Ag Canada Research Station, Box 1240, Melfort, Sask. SOE 1AO.

Keep it clean

Whatever type of shelter you use for calving, the secret to successful barn calving is to keep it clean and dry to prevent infection and illness. In severely cold weather, straw bedding can be allowed to build up, removing only the wet spots daily and covering each stall with just enough new straw to make it clean for each calving cow. The buildup of straw and manure can make the barn a lot warmer.

But if weather warms to where bedding stays wet, it must be more thoroughly cleaned. A small area can be cleaned with fork and wheelbarrow, but anyone with a large barn should design the facility so it can be cleaned with tractor and blade.

Barn calving can be very clean and disease-free, but only if you take pains to make sure each cow has clean bedding and that pairs are not left in the barn too long after calving. Keep them clean and move them out to avoid sickness in young calves.

Stop the wind

A good windbreak is a lifesaver for calving cows and newborns. If a ranch does not have natural windbreaks (such as a mountain canyon, sheltered draw or an area with trees and brush), a good windbreak can be made from large straw bales or even mounds of snow. A windbreak in small second-day pens (for cows coming out of the barn with their newborns before going out to the fields) can help protect calves from weather and cold stress.

On Ray and Linda Glasrud's ranch near Calgary, Alberta, Ray routinely makes a snow windbreak for his calving area before the cows start calving. Using a 4-wheel-drive tractor and blade, he heaps the snow to create a horseshoe-shaped ridge 6- to 8-ft. high around part of their 30-acre calving pasture. Then he readjusts the blade and cuts a sharp edge in the leeward side of the horseshoe, so it is like a wall.

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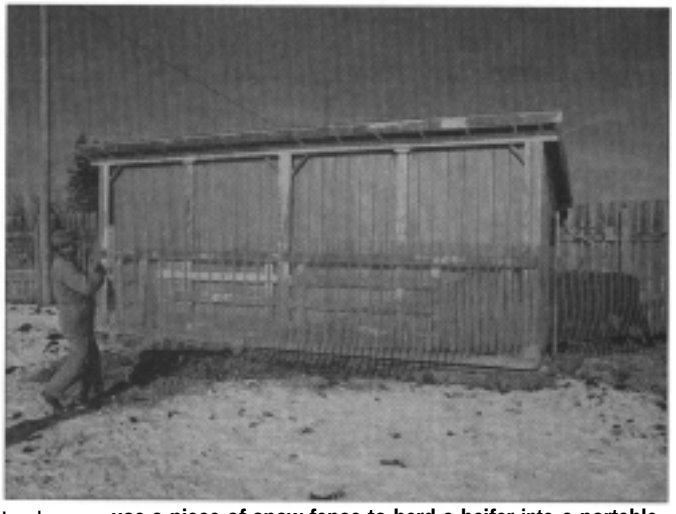
With bedding placed inside the horseshoe next to the snow wall, it makes an excellent shelter for the cows. With the snow scraped off the pasture grass (giving the cows access to forage) and bedding placed next to the snow windbreak, the cows have a warm place to lay and don't suffer the heat loss they would sleeping on frozen ground.

Hay or straw bales can double as wind protection during the calving season.



Herdsmen **use a piece of snow fence to herd a heifer into a portable calving shed at the Canada Agriculture Research Station, Melfort, Saskatchewan.**

Headcatch

Whether you calve in a barn or outdoors, a good facility for restraining a calving cow, or an uncooperative heifer to help a calf nurse, is one of the necessities for making your job easier. A simple headcatch is much better than a squeeze chute, which may cause trouble as the cow will often lay down during delivery. Even if she doesn't, you need more room for applying traction in the proper direction, and if you are using a mechanical calf puller, you won't have room to move it for directing the appropriate pressure. If a heifer goes down on her belly, she can't be rolled onto her side in a squeeze chute.

Oregon State University (OSU) furnishes simple plans for making a calving stall and headcatch (see illustration on following page). This stall can be built outside, but it is better inside a barn if calving in bad weather. If outside, it should be located where you are feeding the heifers, so they will be familiar with it and will go into the stall readily.

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Several commercial headcatches will work for a calving stall if they open to the floor with straight side bars, allowing a heifer to lie down without choking. A curved headgate can be modified by welding a straight pipe into the curved section. The OSU plans show a wooden headcatch because it may be less expensive.

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The gate should have a rope on it so you can shut the headcatch from the rear or side of the animal. The area in front of the headcatch should be open and well-lit so the animal will go into the headcatch readily without balking. If it's dark or looks like a trap, she won't want to put her head through. A floodlight above and behind the animal not only enables the cow to see her way through, but illuminates the area for whatever you need to do — pull a calf, perform a cesarean, or help a calf suckle a reluctant heifer.

The OSU plans call for a pad of rough concrete under the stall to keep the floor from getting muddy or slippery and to provide good footing. It can be kept clean and dry. Sweep it clean between cows or install a floor drain to remove liquid.

In the OSU plans, the headgate is placed between two stout posts. Hinge holders for 8- to 10-ft. panels are mounted on these posts.

After you assist a birth, you should let the heifer back out of the headcatch, pivot and smell the calf.

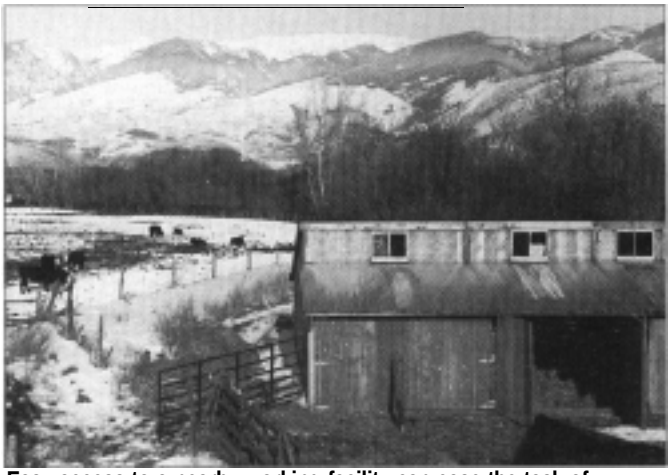
Hinged, swing-away or interchangeable metal gates are attached on both sides of the headgate. A second set of gates are hinged to the back wall (or opposite side of the pen if it is an outdoor calving pen), making a chute for putting the heifer into the headcatch. Once you have her head caught and begin to assist, the gates can all be swung away so she can lie down during the birth, giving you maximum room to help her or to use a calf puller. In an outdoor pen, these swinging panels can also form part of a small pen to later hold the heifer and calf until they are well-bonded (see illustration).

To corral and catch the heifer, one set of side panels can be closed and chained to make the pen small. Using the second set of gates, she can be guided into the headcatch. These panels will confine her adequately and reduce your chances of getting kicked. To keep them from swinging when you want them stationary, the OSU plans recommend you stabilize the panels with an angled foot brace on both sides, then fasten a chain behind the heifer once she's caught.

After a normal birth, the cow gets up, turns around and begins to lick the calf, After you assist a birth, you should let the heifer back out of the headcatch, pivot and smell the calf. If you have to move her to a new location before she smells the calf, it may confuse some heifers and the bonding process is much slower. It's better if your facility is designed to mimic the natural process.

To accommodate a cesarean, the OSU plans call for cutting the left gate in half horizontally to allow the top section to swing down and out of the way. If a calf needs help nursing, the lower portion opens while the top portion confines the heifer.

Another way to suckle a calf if you don't have this type of gate is to swing one panel away and tie the heifer's leg back on that side so she can't kick you or the calf while you help it nurse. The leg should be tied with enough slack in the rope that she can comfortably put her weight on it, but not so much she could swing it forward to kick.



Easy access to a nearby working facility can ease the task of assisting a difficult birth or helping a calf nurse a reluctant mother.

Figure 1. Simple head catch for the calving barn.

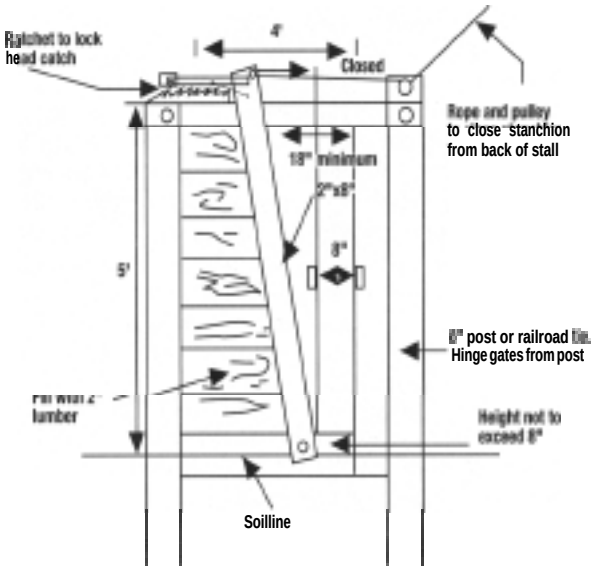
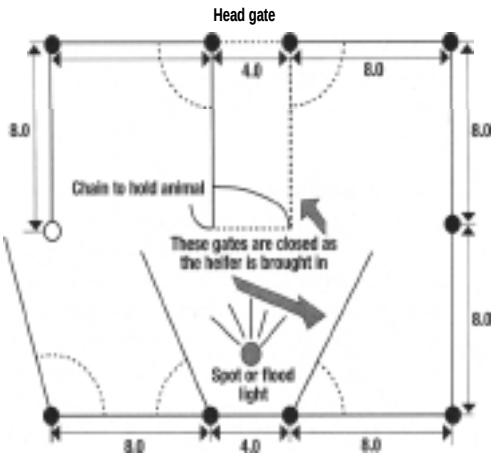


Figure 2. Calving area floor plan.



Oregon State University design