

Little House in the Pasture

Calf shelters reduce weather stress and illness.

by Heather Smith Thomas

Ranchers who calve during late winter or early spring know the value of shelter for baby calves. When my husband and I started ranching in 1967, our cows were calving in March and April, and we had terrible scours, especially when the weather was wet. The pastures on this place were very contaminated with scour "bugs" after intensive cattle use for nearly 100 years before we arrived.

By 1970 we changed our calving season from spring to January to avoid the mud and also to have the cows all bred at home to our own bulls before they went to summer BLM (Bureau of Land Management) range in May. Calving while the ground was frozen greatly decreased our incidence of scours but also made it imperative to have shelter for the calves during cold weather. About 90% of our calves arrived in a 3-week period during January, when weather might be sub-zero. The cows calved in a barn – each one put into the barn after we observed her in labor – but we didn't leave any pair in the barn more than 24 hours. Barn stalls were cleaned with new bedding in place between cows. Each pair went outside as soon as the calf had nursed a few times and was dry and the navel cord had dried up to prevent risk of navel infections.

The calf house

We have a row of second-day pens next to the barn and each pen had a sheltered windbreak corner bedded with straw. The calves quickly learned to use these sheltered corners. These pens helped calves make the transition from barn to field. Many calves are not quite ready to be out in the cold at just 24 hours of age though mama tries to take them to the far corner of the pasture to hide them, sometimes in a snowbank. After spending some time in the second day pens; however, the calf is older and wiser and more likely to use the little calf houses situated in each field.

My husband designed and built our first calf house in 1968 and then built several more the next few years when we transitioned to January calving. Each of these long, narrow shelters (8 by 16 feet) can house about 20 to 25 calves and is built on wooden runners so it can be moved to a different location if necessary.

Each house has a sloping galvanized metal roof and a floor. Having a floor is very important for our situation because it keeps calves up out of the mud or melting snow run-off that may flow across the field. The floor is slatted so urine runs down through it; the bedding stays drier. The floor also makes the house more durable; it holds together better when moved and adds weight to the house so it cannot be blown over in a strong wind.

The front of the house is partly closed, with the opening low enough to keep cows out, and helps to hold warmth in and to keep cold breezes out. If cows have access to the opening, they can still reach in to eat bedding or to worry about their calves being inside the house.

There is risk of a calf being stepped on or lain on if cows congregate in front of a house. We kept the front area yarded off with pole panels or an electric wire, so the calves can come and



go and lounge in the bedding in front of the house on a sunny day, but the cows cannot get to it.

We situate the houses with their opening away from the prevailing wind direction. It's amazing how warm it can be inside, out of the wind, especially with the body heat of several calves in there. This is one advantage to congregating the calves; they are very snug and warm inside the houses.

The calves learn fast about using them. On a wet or windy day or a cold night, all the calves will be inside the houses. During bad weather they may come out only to nurse their mothers and then go right back in again. Having proper shelter can dramatically cut down on stress from wet or cold weather; calves can withstand a lot of cold if they can stay dry and don't have to be outside in the wind. Wet, chilled calves sleeping on ice or in puddles or subjected to constant wind chill are an invitation to disaster.

Even the youngest calves often went into the houses within the first 24 hours of being put out into the field. They know about straw bedding from their experience in the second day pens and are attracted to the bedding in the lounging area in front of the houses. This is also a good place to put a little alfalfa hay for the calves to nibble in their leisure time, where the cows can't get at it to eat it all, or a tub of salt and mineral for the calves.

Each new calf soon tries out the houses out of curiosity or by following another calf's example, watching another calf go into the house. If weather was bad and a cow took her new calf to the far corner of the field before it had a chance to learn about the calf house, we'd herd the pair back to the shelter and put the calf inside the house. Even if it's scared and runs right back out, it usually remembers that it's warmer there, out of the wind, and may stay in the straw by the house or go back inside on its own.

Prevent disease

During the early years we used these houses, we worried about concentrating the calves this way, fearing that having so many all together at the shelter area might aid spread of scours. We moved the houses periodically to clean locations. But, over the years, we learned that this is not a problem if we keep the bedding clean and the calves are grouped according to age.

We always had our calves grouped by age in the various fields, with enough shelters for all the calves in each field. The calves in each group were generally no more than a week apart in age, which also cuts down on spread of scours, since it's often the older calves in a group that pass infections to the younger, more susceptible ones.

For more than 30 years now, we've left the houses in permanent locations in their various fields and pastures. We put in clean bedding every few days or whenever the old bedding started to become soiled.

In recent years, we've cut down our herd size, selling most of our cows to our son and his wife, and we no longer use the range. This change meant we didn't have to breed the cows so early; they could stay at home and be bred to our own bulls. In the past 12 years, we've been calving later in late April to try to avoid bad weather and mud. We still get snowstorms that time of year, however, and the calves still appreciate the shelters.

Reducing stress

Calving in January worked very well for us during the 30 years we did it. Disease is kept to a minimum when weather is cold and ground is frozen. Most of the pathogens that cause scours in baby calves are ingested by the calf when it nibbles contaminated dirt or mud or drinks from a puddle, nurses a dirty udder or licks itself after it has lain in a dirty place.

Having clean bedding for the cows so udders stay clean, isolating sick calves so they don't spread scour organisms all over the pasture and having a dry clean place for the calves to bed in cold or wet weather is more important than worrying about congregating these babies in a small area. Calves stay much healthier if they don't have the extra stress from being wet and chilled or subjected to low temperatures and wind.

If producers do plan to move calf shelters around, they should block them up on boards (a 2-by-6 or something similar under the runners) to keep them from freezing to the ground. When we periodically moved our calf houses, we used three small boards under each runner – one at each end and one in the middle – so we didn't have to bar them loose from frozen ground each time we moved them.

A few years ago we moved two of the houses that had been in the same location for more than 20 years and took them to another field since we were no longer using that field for cows with baby calves. It was a cold winter day when we moved those houses, and even though they had sat there for so long, they were easily moved because they had been blocked up. They also held together perfectly because the floor and runners were well constructed and had not deteriorated over time.

Instant shelter

A calf shelter can be made from big straw bales with a tarp roof. Mesh panels, like hog panels, can be used to keep the cows from eating the outside surface. Pole panels can be placed in front so the calves can get in but the cows cannot. This can be a very effective type of shelter in an emergency or whenever you don't have time to make a permanent shelter. **HW**



Coldest days

We've never lost a calf to bad weather. Even during the winter of 1978-79 when it was 42 degrees below zero during our first week of calving, the cold weather of 1983-84 and the "Siberian Express" of February 1989 (with wind chill equivalent to 100 degrees below zero here in our valley), our calves came through just fine.

All the newest babies were in the calving barn — and we were diligent to get every cow into the barn when she started labor, to minimize chances of one calving outside-though we dried a few newborns in the house. We lost ears and tail tips off some of the cows during the extremes of cold weather but not on the calves. They were snug in their calf houses, out of the wind. We are convinced that our calf shelters saved us lots of doctoring every year and helped eliminate losses from bad weather. We are firm believers in having adequate shelter for young calves. **HW**

Editor's note: Heather Smith Thomas and her husband have a ranch near Salmon, Idaho. She has raised cattle for more than 50 years and has worked with a number of veterinarians on health care issues.

Durable shelter

There are many designs for calf shelters and many innovations for creating "little houses" from all kinds of materials.

Ron Skinner, DVM, a cattle breeder near Hall, Mont., made the skids and crosspieces for his calf hutches from 6-inch well casing obtained from a salvage business.

"We can push or drag these shelters anywhere and they won't break," he says. "The well casing is stiff enough to drag or push over frozen cow manure, and the top of the building won't flex. We used vertical metal pieces and framed it with angle iron, bolted boards to that, and put a metal roof on the frame. These are sturdier than the calf hutches my dad made in the 1960's. We kept breaking the boards by dragging them around."

Skinner's calf hutches don't have floors. If the ground or bedding starts to get dirty, he pushes the building to a new location when feeding cows.

"My tractor has two forks on the loader for handling round bales, and I just slide those tines under the end of the hutch, pick it up a little and slide it any direction, Skinner says. "I can roll a little straw off a round bale right into the hutch after I move it, for new bedding."

Skinner says if calf sheds are moved often, the mess is left behind. "The first 48 hours of life is crucial," he adds. "Calves need a dry place to lie down. Once they're dry and have nursed, they can handle a lot of cold weather if you can keep them out of the wind."

A good calf shelter can give them the protection they need. HW

