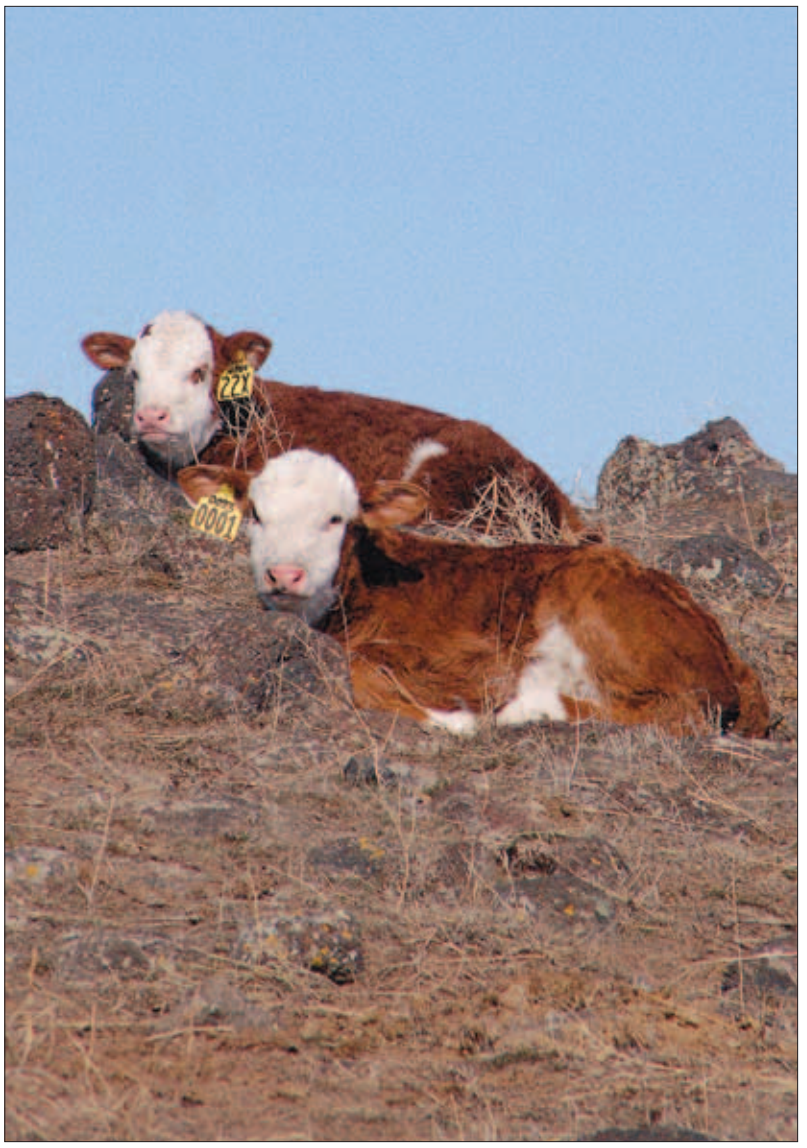

A Calving Season Specialist

Split Butte Livestock's Ron Shurtz was 8 years old when he started calving cows, learning the ropes from his grandfather and father, both astute cattlemen. He offers this advice for calving season.

Ron Shurtz, Split Butte Livestock manager, Minidoka, Idaho.

by ***Kim Holt***

As a cowman on purebred ranches in both Oklahoma and Idaho, Ron Shurtz has spent his whole adult life as a breeding and calving specialist, getting both natural and embryo transfer calves on the ground and then keeping them alive.

For the past four years, he and his small crew have calved close to 800 head of purebred and commercial cows annually at Split Butte Livestock, Minidoka, Idaho.

"If we touched 10 or 12 each year, that'd be about a maximum, having only assisted calves that were abnormal, either backwards or with a foot down," explains Shurtz, who took over as Split Butte ranch manager after the unforeseen passing of his father, the late Ken Tracy, in summer 2011.

Calving success like this, Shurtz assures, starts with genetics. All natural and artificial insemination (AI) sires used by Split Butte are registered and have records and expected progeny differences (EPDs) to assist breeding decisions.

"For generations now, we've been keeping records so that we know the cattle. It should be getting easier as we go along with more data to back up what we think is going to work," he explains.

Referring to calving, he says, "I would say genetics is 50% and management is another 50%, including nutrition, vaccination, and facilities." Good management is imperative, but as he knows, it's not a 100% given to stop all diseases and disorders. "We've had our own share," he says, "but we've learned from them."

Exercise is valuable

Experience has shown him that exercise, cleanliness, and well-prepared facilities and supplies go a long way during this season, which can wear down even a well-experienced crew like his.

The majority of cows, black baldie and Angus commercials, calve outside at Split Butte in March on a section of dry rangeland. But registered Hereford and recipient cows start calving in January. It's then and when the weather gets really cold and nasty that these females are brought into the calving lot at night, where they're checked every two to three hours.

"Some people may think we overdo it, but we try to keep them alive," Shurtz remarks.

Newborn calves are gathered up and put into strawed pens in the barn. They're left there with their dams just long enough to get dried off, obtain first colostrum, and receive calfhood vaccinations and an ear tag, before they're turned back outside into a neighboring pasture with pairs.

Shurtz says they try to separate new pairs from close-up cows as soon as possible so that cows starting labor won't mother other newborns and then not claim their own. While mothering instincts are desirable, they can "really cause a problem" in scenarios like this, he says.

Close-up cows, kept in groups of 30 to 40 head, don't remain in the calving lot but are turned out to pasture daily for exercise. Over the years, Shurtz has learned how valuable exercise is prior to and during calving.

"It's pretty common-sense — non-exercised cows are going to be fat. If you let them stand around and never exercise or travel, calving is going to be tough on them," he assures. "We promote exercise by feeding them away from the calving area, so they walk back and forth." And they try to move feeding grounds daily to reduce manure buildup.

Cleaner is better

Keeping things clean is another key factor of calving that Shurtz learned in his youth and from past experiences, especially with bedding in the calving barn. He impresses upon his crew, "The pens get cleaned after every calf goes out. It doesn't matter if the pair was there for an hour or two. We clean out the old straw and put in new."

He explains, "It just doesn't allow for the straw to set there, stay wet, and harbor potential disease. The cleaner you can be during calving, whether inside or out, the better off you'll be."

Shurtz shares they'll bed calves in outside pastures only when they need to. "Even if we have to bed, we try to move and not bed them in the same

Split Butte Livestock: Not your average purebred outfit

- Extensive embryo transplant registered Hereford program.
- 700 commercial females — two-thirds mated to Split Butte Hereford bulls with the goal of turning out high-quality baldie calves in numbers.
- Annual production sale each March, featuring registered Hereford bulls and sets of fancy commercial baldie heifers. These females help show existing and prospective bull customers the capabilities of a Hereford herd sire.
- Annual female sale each fall, featuring show heifer prospects, bred heifers and foundation females.

area twice," in an effort to keep the pathogen load as low as possible in the neonatal environment.

Because their immune systems are not yet fully developed, calves basically come into the world unprotected. The colostrum they receive immediately after birth is what helps protect them from disease by conferring passive immunity. This milk supplies antibodies against common calf diseases, such as scours, until a young bovine's immune system is fully developed and can fight off disease on its own.

Robert Larson, DVM, professor of beef cattle production medicine at Kansas State University College of Veterinary Medicine, shares that scours in beef calves is due to inadequate protection from colostrum and/or an overwhelming challenge with scour-causing germs because of muddy conditions, weather stress and crowding.

"Wet, muddy, and damp conditions are ideal for the germs that cause scours. Anything you can do to keep calves away from wet areas will help prevent the disease."

Larson advises that a calving area should be free of mud and protected from wind. "A large pasture with good drainage and a natural windbreak is probably all that is necessary."

In 2010 Split Butte had more precipitation than it's had in March for years. "It was muddy and deep," Shurtz reports. "But we had those cows outside. Where we are, we have brush and ridges where the cows can lay down and have a calf. And they'll go find it."

He, too, doesn't advocate keeping cows in calving lots or even feeding pregnant cows in bunks. He's quick to point out the first thing a cow does when she finds her spot at the feedbunk is knock the neighboring cow in the belly. And bunk aprons need to be kept clean so that there isn't mud and manure buildup on udders, so newborns aren't drinking manure — and getting a pathogen load — with their first milk.

Turning cows out of the calving lot during the day and calving out in large pastures really helps with this issue. But calves still need vigor in order to quickly get up after birth and nurse because winter and early spring weather can be anything but nice in central southern Idaho.

"Vigor is genetic and pretty important. That's something that we watch for in sire groups and record," Shurtz remarks. Over the years, Shurtz and his crew have learned that calves with heavier birth weights don't have near the energy when born as lighter calves and take longer to get up and get going. So vigor is something they really keep an eye on.

Idaho's colder climate lends to snow, rather than rain. Environmental stress such as wet, cold weather can be rough on calves born in winter and early spring, and Extension educators at South Dakota State University (SDSU) say calves born in wet, cold conditions are more prone to cold stress or hypothermia. The precipitation adds to the negative effect on calf survival when temperatures drop.

Saving calves during calving season means more cattle to market on sale day for Split Butte's reputation Hereford seedstock and commercial herds.

"The cleaner you can be during calving, whether inside or out, the better off you'll be."

— Ron Shurtz

Shurtz couldn't agree more with them. "I lost more calves in Oklahoma in March because of rainy, wet, cold weather than I'd ever lost in the cold and snow in Idaho. If calves can't get dry and have somewhere dry to go, it's really, really difficult." He compares this situation to humans who become chilled outside and can't ever get warmed up once inside.

Methods for rewarming calves are varied, say SDSU educators but may include a warm water bath, warm air or heat lamps (hot box), and warm blankets. Warming boxes are available commercially or producers can build their own.

Well-prepared facilities assist

While Split Butte doesn't have a warming box in use, it does have two well-prepared calving facilities, which Shurtz classifies as another key to their successful calving seasons.

Cows can be assisted quicker and moved in and out with the least amount of stress if a facility is ready. He explains, "We have a maternity pen that has a head catch with a divided panel in the back so you can open the bottom side and help a calf nurse if necessary."

Shurtz advises: "The quicker you see a problem, and the quicker you can solve it, the better chance you have of saving that calf. And that's why we night check in our calving lot every two to three hours. If we detect a problem within the first hour or two, the chance of saving that calf is way higher than if we waited six, seven or eight hours. Our chances go down with every minute that cow is having trouble."

He also plans for and orders his calving supplies, including vaccines, vitamins and ear tags, well ahead of calving season. And while his crew is trained hands-on, they discuss and observe the major things — such as abnormal presentations — and work together to save calves.

"At nights, if the guys have a problem they call me," he shares, adding, "the more help you have, the better off you'll be. It's tough sometimes to handle it all by yourself — you need extra hands at calving."

He also reminds that a cow has an "unbelievable" natural instinct to take care of herself. Therefore, "you need to remember to let her do her job — she knows what she's doing if we give her the opportunity to do it without trying to over-manage." **HW**

Calves require immediate colostrum for proper immunity

Preparing for calving season also means preparing for any surprises Mother Nature may impart. With this in mind, it's a good idea to be prepared with a supply of frozen colostrum or commercial colostrum product on hand, especially for when calves are weak or too stressed to suckle.

Robert Larson, DVM, a professor of beef cattle production medicine at Kansas State's College of Veterinary Medicine, reminds producers that for a calf to consume adequate amounts of colostrum, it must be able to stand, walk, find the dam's teats and suckle. Furthermore, the dam must stand, have a good maternal bond with the calf and have teats that can be grasped by the calf.

"Problems in any of these areas can lead to late or decreased colostrum intake and low amounts of antibody protection for the calf," he says.

Colostrum provides the calf with its first mechanism to fight off infectious disease agents. Various immunoglobulins and other substances that provide the first immunity are contained in this first milk. It also supplies the calf with energy.

If calves require supplemental colostrum, it's important they receive it as soon as possible after birth, preferably within two hours. Here's why:

- The calf's intestinal lining begins to close within the first 60 minutes after birth.
- Nine hours after birth, 50% of the gut's ability to absorb immunoglobulins is gone.
- Colostrum quality diminishes rapidly after a cow gives birth.

The best source for colostrum is from within the existing cow herd, say South Dakota State University educators. They report that colostrum quality varies from animal to animal and between cows and heifers. Cow colostrum has a higher concentration of antibodies than that from heifers, and colostrum from beef cows is more concentrated than that from dairy cows.

They encourage producers to be cautious when obtaining colostrum from dairies and other sources outside the existing operation, as diseases can be introduced into the herd this way.

Other options are commercial colostrum products known as colostrum "supplements" or "replacers." Colostrum "replacers" are defined as containing at least 100 grams of globulin protein per dose, plus essential nutrients needed by the newborn calf. They contain more globulin protein than colostrum "supplements" and provide more globulin protein per liter than poor- or moderate-quality colostrum.

Colostrum replacers are products designed to completely replace maternal colostrum for newborn beef calves as soon as possible after birth, whereas a colostrum supplement is just that — a product fed as a nutritional supplement to mother's milk as soon as possible after birth, often in calves exposed to harsh environmental conditions. **HW**