Learning to eat and drink, being separated from Mom, and adapting to a new environment make weaning one of the most stressful events in a calf’s life. Reducing that stress is crucial to calf health—and future performance and productivity. You can’t totally eliminate stress during this process, but there are steps you can take to minimize it.

**Spread out the stress.** Dehorning, castration and ear tagging also cause stress. Therefore, they should not be performed at weaning, but much earlier when calves are easier to handle and recover more quickly.

**Address health challenges in pens.** To protect calves from health challenges, young animals should be dewormed at least once before weaning. They should also be vaccinated against clostridial diseases, such as blackleg, as well as respiratory diseases (IBR, BVD, P13, BRSV). Warren Gill, Ph.D., director, School of Agribusiness and Agriscience at Middle Tennessee State University, says he vaccinates calves on his cow-calf operation at about three months of age and gives a second round of respiratory vaccinations before weaning. The protocol and timing will vary depending on the producer’s operation, weaning and veterinarian recommendations.

To further address health challenges and calf scours, make sure weaning pens are large enough for the number of calves weaned there. Gill recommends 100-200 square feet per calf, although this can vary. It can be as low as 30-50 square feet in a concrete-surfaced lot to as much as 800 square feet in an unsurfaced lot.

He also emphasizes the importance of keeping pens clean and avoiding mud, which can cause injuries and create an environment that fosters disease. He recommends scraping concrete pens to remove manure at least once a week. A well-designed sloping pen may make it easier. Extension agents can provide design ideas.

**Make weaning pens work for you.** During the first few days of weaning, calves will wander the perimeter of the pens, exploring limits and looking for Mom. By placing feed and watering troughs on the perimeter, calves are more likely to eat and drink.

**Monitor calves for illness.** To help address illness and death, Gill says it’s essential to watch for sick calves.

“You need to spend a little time because calves, being prey animals, like to hide pain,” he explained. “Look for subtle symptoms—nasal discharge, cough, or lowered heads. If you notice symptoms, take their temperature right away and call your veterinarian. Don’t wait. Twelve hours can make a difference in whether you can save a calf from pneumonia.”

Gill also recommends placing sick calves in a separate pen, close by, rather than treating and returning them to the weaning pen. This protects against contagion and keeps larger, healthier animals from bullying sick ones.

**Pre-weaning: ease the transition.** Fenceline weaning is one way producers can reduce stress if it’s workable within their operations. Cows and calves are placed in adjoining pastures, allowing calves to see and hear their dams, thereby reducing stress. Of course, fences must be adequate to keep calves from reaching through to nurse.

According to Clay Mathis, Ph.D., professor and endowed chair of the King Ranch Institute for Ranch Management at Texas A&M University, research has demonstrated that fenceline-weaned calves gained 50 percent more weight in the first two weeks after weaning than those abruptly removed from their dams.1

Another pre-weaning method uses nose tags that prevent calves from sucking. Gill said that research conducted on nose clips measured stress by how much calves walked. The results indicated that calves with nose tags walked 10 miles a day, compared to 25 miles a day for calves abruptly separated from dams. Research also showed that calves with nose tags gained more weight.

“Those with nose tags seemed to continue to gain,” Gill

(Continued on pg. 2)
said. “On the other hand, if you abruptly take calves away from cows, they may easily lose 15-20 lbs. while calves weaned using nose tags and fence-line weaning may gain that much more. The difference can be in the 50 pound range.”

If these weaning techniques aren’t possible, producers can ease the transition by familiarizing calves with the weaning area by moving cow-calf pairs into the weaning pen a few days before weaning. Calves will quickly learn from their dams where the feed and water are located and begin to eat and drink.

**Jumpstart feeding.** Putting creep feed in weaning pens where calves have access before weaning can also help them adjust to feed.

“I’m an advocate for using some type of creep feeding,” Gill said. “The more you do to help the calf become nutritionally independent, the better.”

He added that creep feed should contain balanced nutrition, including fiber for rumen microbe development and protein for muscle development. It should also be palatable. Gill said Purina Animal Nutrition has excelled in this area, while introducing additives that keep cattle from eating too much.

Purina’s AccuCreep® contains vital energy and protein, in the proper proportions, along with Intake Modifying Technology®, which encourages animals to eat smaller, more frequent meals, thereby controlling intake and weight.

Another invaluable component in the calf nutrition program is Purina’s Stress Tubs, designed to combat stress in young cattle during pre-weaning and other upsetting situations. In addition to providing energy, protein, vitamins and essential trace minerals vital for better immunity support, Stress Tubs contain yeast culture, which aids rumen development. The tubs also incorporate enzymes that stimulate saliva, which promotes rumen health. Talk to your Purina dealer or local representative today about the best solution to combat stress in your calf nutrition program.

Internal and external parasites reduce milk production, performance and reproduction. As a result, they cost our nation’s beef industry hundreds of millions of dollars each year.

Worms are among the most costly parasites. Calves infected with worms consume less feed. Further, the worms compete with their host for nutrients. Therefore, calves weigh less and may have a dull hair coat – maybe even diarrhea. In severe cases, calves can die as a result of blood loss.

So, while we will never eliminate these pests, it’s important to control them as much as possible to maintain a healthy, productive herd. Here are a few facts and tips to help you do that.

- **Worms are more likely to be picked up when cattle are grazing or eating feed from the ground, rather than when eating from feeders or feed bunks.**
- **Using a microscope, you can examine fresh manure to determine which parasites are present and approximately how many.**
- **Younger animals are more susceptible to worms than older cattle; the younger cattle (from 3 months to 2 years old) usually respond positively to deworming.**
- **In warm climates where worms are more prevalent, calves can benefit from deworming every 3 to 8 weeks during spring and fall grazing.**
- **Older cows have developed some degree of immunity. However, deworming adult cows will reduce the number of worm eggs in their manure, thereby reducing transmission to younger animals.**
- **Adults should be dewormed spring and fall to control the number of worms they leave in manure.**
- **Dewormers can be administered orally, by injection or included in feed.**
- **For most effectiveness, rotate dewormers according to chemical class.**
- **Rotate pastures to reduce worm eggs. Worms that are not consumed by cattle die, especially when it’s hot and sunny.**
- **Deworm animals three days before moving to a new pasture to reduce worm eggs in the new pasture.**
- **Break up manure piles with a harrow, preferably during hot weather, to dry manure and kill eggs and worms.**
- **Consult your veterinarian for help in developing a customized, comprehensive program to control internal parasites.**

Talk to your Purina dealer or local representative today to develop a deworming program based on your herd and conditions.

Until recently, Scott Kill and Brent Blythe, along with Brent’s father, Sam, were primarily grain farmers. They raise corn, soybeans and a little wheat on their farm in Spencerville, Ohio. Then, through their partnership, K&B Cattle, they launched a new endeavor. They began feeding out about 420 head of cattle a year in a building they erected for just that purpose.

It’s 360 feet long, including 40 feet for storing corn, pellets and straw, 240 feet for cattle pens (six of them) and 80 feet for storing manure and extra bales. Scott said the space for manure enables them to avoid leaving it in pens or stacking it outside.

“It’s all in one building, under one roof with no outside lots,” Scott said. “We often have snow as late as May here. The building helps us control the environment a little,” he added.

They purchase steers, mostly Holsteins, in groups of 140-150, three times a year, usually in April, October and December. The steers come from Mercer Landmark, Inc., a farmers’ cooperative operating 20 branches in four Ohio counties. The steers are purchased at around 450 lbs. per head, then K&B takes them to approximately 1,400 lbs.

The advantage of purchasing from the same source is that as soon as they sell a load, they know they have another batch coming in, commented Travis Spicer, Beef Specialist at Mercer Landmark.

Scott said the arrangement with Mercer Landmark “doesn’t make growing cattle completely worry free, but it’s one less thing you have to worry about to assure quality. Mercer Landmark has a lot more sources and a little more clout than a single farmer would.”

What’s more, Scott said that no matter what branch of Mercer Landmark he goes to, “they are very friendly and have our best interests in mind. They don’t try to push a product if it’s not right for us.”

Travis said most of the feeder cattle it buys for K&B are dairy calves, which Mercer purchases through sale barns in Wisconsin, New York and Pennsylvania.

K&B’s feeding program includes pellets and corn gleaned from their own operation, which Scott said allows them to “know what they are getting” and can provide higher quality corn than they can get “at the elevator.”

For the first 30 days, Scott and Brent supplement with Purina’s Golden Dairy® Steer, which contains 38 percent protein, then they finish with SteakMaker® Co-Product Balancer, which contains 26 percent protein and is designed to be fed with byproducts. The balancer comprises around 3.5 percent of K&B’s ration, with 15-20 percent being gluten, 2 percent straw for roughage and the remainder corn.

“‘We’ve had good luck achieving an average daily gain of 3 lbs. per day...’

Scott Kill, K&B Cattle

“The Purina products work pretty well with our rations,” Scott stated. “We’ve had good luck achieving an average daily gain of 3 lbs. per day, which compares favorably with what other people tell us. We’re pretty well satisfied and haven’t seen any reason to change.”

Travis said the Co-product Balancer pellets and gluten pellets are a good fit for Scott and Brent’s operation, which hasn’t invested in equipment to process corn silage. Besides, Travis added, “Cattle won’t eat fines. If you have silage, you can premix it with the mineral and the moisture in the silage will help to mix it better. But, if you mix loose minerals with straight corn, you can have sorting issues.”

Scott said although he didn’t grow up on a farm, he’s always been interested in livestock. He lived in rural areas and was involved with pigs and steers in 4-H. So he enjoys being outside and working with the animals. All three partners are enthusiastic about producing the best stock they possibly can.
Cover Crops: Good for Soil, Good for Livestock

The concept of a cover crop is pretty simple. You plant a primary crop for harvest, such as corn, soybeans or wheat, then a cover crop after the first crop is harvested. A cover crop can protect the soil from erosion and reduce loss of nutrients from leaching and runoff.

Such cover crops can also be “just the ticket” for economical fall grazing of cattle. Cover crops planted in late summer to early fall can be grazed, or hayed in the spring, to help stretch forage supplies. Planting a successful cover crop involves knowing what to plant, when to plant it and how to best get it into the ground.

CROP CHOICES

What cover crops will provide the best forage? It depends on a number of factors, such as your crop management zone, the crop you are planting and how to best get it into the ground.

WHEN TO PLANT

When planting cover crops, it’s smart to heed a few rules of thumb. When it comes to timing, sow cover crop seeds at least 30 days before the first expected fall frost date in your crop management zone. For cover crops that are marginally hardy in your zone, adjust the sowing date to 60 days before the first expected frost. Timing is important when it comes to cover crops. A lag of two weeks can make an enormous difference in cover crop growth.

PLANTING TECHNIQUES

Some large operations use aerial seeding, which can do amazing things. Planes can carry enough seed to plant 12 to 100 acres each roundtrip. Helicopters carry smaller loads, but can land and reload very close to the planting acres.

Broadcasting by ground is the most popular and accurate seeding method. Spinners, drop tubes or air pressure are common broadcast seeding tools. Broadcast seeders can be mounted on tractors, tillage tools or other implements.

Seeding works well for metering small seeds and gives good placement and seed-to-soil contact. It’s particularly effective in no-till crop management systems.

BEWARE OF FORAGE BLOAT

There are some instances when cover crops may be detrimental to livestock. Bloat can occur on any forage that is low in fiber and high in protein. It’s most common with immature legume pastures, and it usually occurs when cattle are first presented these pastures. It rarely happens with grasses, coarser pastures or hay. Bloat typically follows a heavy feeding or grazing period. Animals that are hungry or aggressive feeders are most at risk.

Customary bloat precautions include taking the edge off a herd’s appetite before turnout, acclimating cattle to new pasture gradually over several days, and offering a dry hay supplement or adding a bloat preventative to water sources.

SUMMARY

Providing cover crops for cattle can be an excellent way to extend or get an early start on the grazing season. It also provides variety in the autumn and early winter, allowing cattle to enjoy an assortment of different grasses, legumes and brassicas. And, if the weather holds out, fall grazing can be lengthened into early winter or later.

Remember, your Purina dealer can help you determine the types of supplements you will want to use regardless of the type of cover crop you plant. Just ask about the many products containing Intake Modifying Technology® to help assure your cattle only eat the amount of supplement they need based on the forage they consume. Products such as Accuration®, Sup-R-Lix® and Wind & Rain® Minerals are ideal for cattle grazing cover crops.
For Larry and Jeff Gettinger, breeding and raising cattle isn’t just a business. It’s a way of life.

Their parents, Dan and Barb Gettinger, began raising cattle on this Rush County, Indiana farm in 1978. Larry and Jeff worked alongside Dan (now deceased) to acquire the knowledge and skills necessary to build and maintain a successful crop and cattle operation. Although their mother Barb is still involved, she is perfectly content to let the boys handle the “physical labor.”

Today, they’ve split the farm’s responsibilities. Larry is in charge of the 1,000 acres of cropland, and Jeff heads up the 120 cow beef operation. They also sell show cattle, bred heifers and a few bulls.

Larry lives adjacent to the farm with his wife, Michelle. Jeff and his wife, Lisa, live about a mile north. Between the two families, there are a total of four children and five grandchildren.

“Our goal is to have the best of both worlds—performance cattle, plus show cattle,” Jeff explained. “It’s hard to do both, but we believe we are close to doing it right.”

Doing it right includes a sale of bred heifers every autumn when they sell 40-50 heifers, and sort out about 20 show heifers. Jeff said he also does a lot of embryo work and flushes cows so they propagate genetics faster.

“If we flush, we may get multiple calves out of the cow,” Jeff said. “So, you can improve the quality of your herd in a quick way.”

He said they have developed a Chianina/Angus base. In the past three to four years they have started adding Simmental on the maternal side for productivity and longevity.

Another way he achieves quality is by using a host of products from Purina Animal Nutrition. In fact, he said he’s been using Purina products for 15-20 years.

Jeff starts calves with Rangeland® 16 creep feed. In the weaning pen, he uses PreCon® Complete for 3-4 weeks, achieving 4.1 lbs. average daily gain on 40 head of cattle last fall. Bred heifers are developed on Accuration®. They keep Wind and Rain® Minerals out at all times and provide Availa® 4 Tubs between weaning and breeding. Further, he uses Accuration® Range Supplement 33, switching to Sup-R-Lix® 2HL tanks and grass for the summer and into the fall.

“Sup-R-Lix boosts heifer weaning weight and helps with fetal programming and heifer development,” Jeff said. “We’ve seen really good conception rates when using that product.”

“The overall quality of the cattle has proven the Purina products do what they’re supposed to,” he added. “We can’t complain about how the cattle look. When we get ready for the sale in the fall, it’s amazing how these heifers have shaped up, and we’ve probably done it with less feed than many use.”

Because they have their own grinder, the Gettings mix their own corn with Accuration® Range Supplement 33. They also mix their own grains with Purina products to make creep feeds and show feeds.

The Gettings have a comfortable, dependable relationship with their dealer, Falmouth Farm Supply, which has served the area since 1965. In addition to selling Purina products for 30 years, they also carry Pioneer seed, fertilizer, chemicals and offer grain facilities at two of their three locations. David Burkhardt, the Falmouth Farm Supply representative, and Jeff have “known each other our entire lives.” So literally, dealing with Falmouth is like working with a good friend.

In recent years, the family has complemented the farming and cattle operations with a new enterprise—a meat business, which includes a custom butcher shop and a retail meat shop, which opened in Rushville on Labor Day, 2013.

So far, Jeff said, the meat business is going “unbelievably well.” In fact Purina Sales Specialist Katie Esselburn said when she’s gone there, the “customer line has been out the door.” They sell fish, chicken, pork, beef and a few specialty meats, such as bison. And they have a freezer section for locally grown beef and pork.

In an atmosphere of changing times that seems to focus more on profit than quality, the Gettings take pride in adhering to the principles learned at the hands of their parents, while improving stock quality and performance.

“Customers know they can take our cattle out and breed them and they will perform well,” Jeff offered. “We have several repeat customers and new ones coming all the time. I can’t think of a better way to spend my time. I wouldn’t trade it for anything.”

Jeff (left) and Larry Gettinger, Gettinger Chiangus.
 Produce Corn Silage to Enhance Your Feeding Program

Corn silage is a popular source of feed for cattle, especially during cold weather and when pasture quality is subpar. It’s high in energy and digestibility, and is easily adapted to mechanization from standing-crop to time of feeding. Corn silage is also a great fit for no-till and double-cropping programs.

However, if you want to produce high-quality corn silage, you must understand the silage process—and do an exceptional job in growing, harvesting and preserving the crop. Follow the tips below and they will help put you on the right track. Your local agricultural extension office is a great source of information, too.

1. Prepare your soil

Growing corn for silage removes more nutrients from the soil than corn grown for grain and most other commonly grown crops. Agricultural extension offices typically recommend a soil test and fertilizer recommendation based on the crop and the anticipated yield—based on the quality of available soil resources.

Fertilizer recommendations usually call for higher levels of nutrients for soils with low to optimum soil-test levels. Therefore, fertilizer programs can be a bit more costly, and soil monitoring is critical. The higher nutrient levels are intended to replace nutrients removed from the soil—not because the crop will respond to higher fertilizer applications in the short term.

2. Select the most appropriate corn seed hybrid

Corn hybrids designated for silage production should produce high yields of quality silage before frost arrives. The production potential of hybrids can be obtained from silage performance tests. To maximize corn silage yield potential, select hybrids with a relative maturity (RM) rating up to 10 days longer than a full-season grain hybrid for your area. Pushing the maturity of the hybrid you plant pays back in added yield as longer-day corns generally have higher yield potential.

3. Plant at the proper population

The University of Tennessee Extension Service recommends planting about 20 percent more plants when corn is grown for silage than when corn is grown for grain. They believe plant populations should be based on the expected yield of silage.

However, Robert Larmer, of Progressive Dairyman, warns that “all hybrids are not created equal.” “Some hybrids will perform well no matter how close they are to other plants, while others need their space to grow and thrive.”

Hybrids sold today generally have a recommended planting rate that will deliver the best performance. A seed specialist can provide you with this information before planting season. Modern hybrids can handle the stress of being planted close together much better than hybrid corn could several years ago.
For farmers weaning calves this fall, Stress Care™ 5 may be just the product they are looking for.

Previously known as PreCon 5, Stress Care 5 offers cattle producers a way to help calves develop during weaning and receiving, while utilizing their other feed sources at the same time.

According to N.T. Cosby, Ph.D, beef nutritionist for Purina Animal Nutrition, the name of the product was changed to distinguish it from others in the PreCon line that are complete feeds. Stress Care products, on the other hand, are concentrates designed to be used with on-farm resources such as quality pastures or stored and stockpiled hay, grain and silage.

Cosby said that during the weaning or receiving phase, Stress Care 5 helps producers to get cattle eating quickly, while delivering protein, energy and additives that enhance rumen development, thus allowing calves to increase their forage intake.

“During weaning and receiving, calves are stressed, and it's important to get them eating quickly to address health challenges and improve performance,” Cosby explained. “Stress Care 5 is very palatable, which helps to get the calves eating quickly. It also helps the rumen develop, which helps them consume and utilize forage better.”

And, because it allows the farmer to take advantage of the other feed resources he has on hand, it delivers performance at a moderate rate of gain. Cosby said the typical rate of gain on Stress Care is 1.5 to 2.25 lbs. per head per day, so it doesn't provide too much energy too fast.

Cosby said Stress Care 5, which is hand-fed at a rate  of 5 lbs./head/day (hence the number following the name), has been well received by producers who say it can get cattle eating quickly, while delivering protein, energy and additives that enhance rumen development, thus allowing calves to increase their forage intake.

TALK TO YOUR PURINA DEALER ABOUT PRODUCTS SUCH AS ACQUISITION® FINISHER, SUP-R-LIX®, AND STEAKMAKER® FEEDLOT SUPPLEMENTS TO FURTHER ENHANCE THE PERFORMANCE OF YOUR HERD. IF YOU FOLLOW THESE STEPS, YOU CAN PROVIDE YOUR CATTLE WITH A CONSISTENT DIET THAT IS PALATABLE AND HIGHLY DIGESTIBLE.

4. Plant at the optimum time

Corn for silage and corn for grain generally have the same planting date characteristics. The ideal planting date runs from April 20 to May 10 in the northern Corn Belt. Pioneer agronomists recommend waiting until soil temperatures reach 7 degrees Celsius (44 degrees Fahrenheit) before planting to achieve maximum germination and stand.

5. Control weeds

Weeds compete with corn for light, nutrients and water, especially during the first 3 to 5 weeks following crop emergence. That’s why it’s critical to control weeds before they are 6 to 8 inches high. Otherwise, they will begin to affect yields. Weeds may also reduce silage quality, increase grain moisture content and slow harvesting by causing wheel slippage or clogging.

An integrated weed management program combines cultural, mechanical and chemical methods. A vigorous, competitive crop produced through proper seedbed preparation, variety selection, seeding rates, fertilization, irrigation, cultivation, pest control and crop rotation is the best defense against weed infestations and competition.

6. Harvest at the correct stage

Harvesting a crop that is too wet often results in a poor, undesirable fermentation and, in the case of upright silos, extensive nutrient loss in seepage. Material that is ensiled too dry is difficult to pack in bags, bunkers or piles, and the resulting oxygen within the silage mass will cause extensive nutrient loss and promote spoilage.

7. Preserve the corn silage carefully

The object of silage making is to preserve the harvested crop by anaerobic (without oxygen) fermentation. This process uses bacteria to convert soluble carbohydrates into acetic and lactic acid, which “pickles” the crop. In a tightly sealed silo, it can be stored for long periods of time without losing quality.

Stress Care™ 5 Delivers Performance, Utilizes On-Farm Resources

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Cosby said Stress Care 5, which is hand-fed at a rate of 5 lbs./head/day (hence the number following the name), has been well received by producers who say it can get cattle eating quickly, maximizes gain during the starting period and supplements their forage nicely.

He added the number one factor that dictates the success of Stress Care 5 is the quality of hay that is fed with it.

“It doesn’t have to be exceptional, but the hay should be at least 10 percent protein,” Cosby said. “Protein, which typically indicates the hay was harvested at the appropriate time, not only provides important nutrients, it also makes the hay more palatable so that calves eat more, sooner.”

And, that’s a recipe for better health, improved performance and higher profits.

For more information about Stress Care™ 5 and other products to help you get stressed calves eating quickly, while making the most of the other forages you have available, contact your Purina dealer or local representative today.
Six Easy Steps to Fall Cow Care

By Larry Hollis, DVM, M.Ag.

Healthy cows are a critical element in your herd's productivity. As you move into winter, here are a few management tips to help assure they will continue to add to your bottom line.

**Preg check.** For spring-born calves, the first thing to do is pregnancy check your cows. If they are not pregnant, sort them off. Think of them as employees—if they aren't working for you, you have to let them go.

While you are preg checking, assess cows for soundness, good eyes, teeth and udders. Even if she is pregnant, you want to make sure a cow has everything going for her so that she can raise a spring calf next year.

Another criteria for sorting cows is calving date, something your vet can determine when preg checking. You may want to consider selling late calvers so that your calves are more uniform, born earlier in the calving season, and weigh more when they are sold.

**Deworm and control lice.** Once you’ve determined which cows you will keep, think about your parasite control program. Fall is the perfect time to control internal and external parasites. You can use two different products or one, such as an avermectin, that will help control both types.

**Vaccinate.** If your herd has a history of winter disease, such as black leg or clostridial disease, vaccinate for them in the fall. Some herds in northern climates have winter problems with salmonella and winter dysentery. If you know the cause of these, vaccinate against them. If leptospirosis or campylobacter (vibrio) are problems in your area, vaccinate for these 30-60 days prior to bull turnout.

**Assure adequate feed.** Check the long-range weather forecast to assure you are stocking correctly for your pasture and hay resources. If you don’t have enough pasture or hay, you’ll need to either cull some animals or purchase additional resources.

**Plan for calving.** As winter approaches, you need to think about where you will calve cows. If scours are a problem, the best way to control them is by providing a clean calving pasture, rather than relying on vaccines.

**Supplement protein.** Provide at least 7 percent crude protein to feed the rumen bugs in mature cows; 8-9 percent in bred heifers. If pastures aren’t adequate, supplement to reach these targets. Otherwise, the cows’ rumen bugs will not be able to digest and utilize any low quality resources you provide them, whether it’s hay, corn stalks or milo stalks.