

September 2018

Preparing for a Storm

Howard Cormier, Southwest Region Horse Specialist

Louisiana is no stranger to livestock losses due to hurricanes. Hurricane season began on June 1, and it is never too early to start preparing your horses for potential storms.

Planning is the key to keeping your horses safe. Ensure that your horse is up to date on all vaccines. Create a plan with neighbors and surrounding farm owners and identify available resources in the surrounding areas. This includes an evacuation route, stabling locations, feed availability, emergency kits, and ensuring your horses are trained to load in a trailer if needed. If you are planning on evacuating, leave early enough to prevent traffic delays. Keep in mind that during evacuation, management practices may change; monitor your horses closely for dehydration and signs of colic or intestinal distress. If you plan to weather the storm at home, here are some suggestions that may help keep you and your horse safe.

- Have a minimum of two weeks supply of hay/feed stored in watertight containers. Place these supplies in the highest and driest area possible.
- You will need a minimum of 10 gallons of water per horse per day. Fill clean plastic barrels with water, secure the tops, and store them in a safe place near your animals.
- Prepare an emergency barn kit that includes a light source, batteries, rope, chain saw, fuel, hammers, saw, nails, screws, spray paint and fencing materials. Keep this kit in a secure place before the storm.
- Notify neighbors and family where you will be during the storm.
- Collect identifying records for each animal, including a recent photo of each horse with a family member in the photo, medical documents, special needs, tattoos, microchips, brands, scars or any other permanent identification, owner information and veterinarian contact information. Place this in a secure location that you can

reach AFTER the hurricane. You may even consider sending a copy of these documents to a friend out of hurricane reach that can be accessed later.

- Attach identification to all horses (fetlock ID tags, tags on halters, spray paint phone numbers on horse or tie waterproof bag containing ownership information in the mane).
- Turn off circuit breakers to the barn or area where horses will be kept (a power surge could cause sparks or a fire).
- Provide hay/water for each horse during the storm.
- Remove any hazards from the area where the horse will be kept.
- If horses are kept outside, allow them access to higher ground.

The destruction each hurricane can cause is unpredictable. While there is no way to know for certain if you will be affected by a hurricane, creating a plan will prepare you to handle any situation that occurs. Make sure your horses know how to load in a horse or cattle trailer. If you do have to evacuate due to an approaching storm, that's not a good time to teach trailer loading. You would not want to get into a big fight with a resistant horse and then have to haul to a vet because of an injury while loading. They can bang their heads, cut themselves, or get a leg caught under the trailer, so practice this during calm conditions before you get into a real storm.

Consider whether your fences are strong enough. Barbed wire is considered unsafe for horses, but most of us have it because of the low cost. Barbed (bobwire) wire will let the wind and some water flow through it. Solid board or plastic fences will go down in sustained high winds, and posts can break at ground level. I had that experience with landscape timbers on my arena. The 16 foot livestock panels held the fence together, but it was leaning badly in

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several places.



Horses should be prepared to load quietly without resistance.
Photo Credit: Howard Cormier

Live oak trees are considered good for storm survival, but big branches that fall on fences cause major damage. If a limb breaks or smashes a fence, horses could simply step over the downed wires and escape. Water oaks provide quick shade, but are the most destructive trees during a storm because their trunks become hollow and weak as they age. Remove old, dead or weak trees before the wind picks up, especially if they are near barns or structures.

Consider a “wind release” feature on barns or sheds. This could be as simple as some kind of window or flap that will let wind escape. Sheds that are open on only one side act like a parachute, and will be blown apart, or roll through the pasture. Plan your barn with this in mind. Keep it open so wind can go through. Anchor portable buildings so they don’t blow over.

If electricity is off, how will your horses get water? Most storms cause flooding, but that’s not always the best to drink, and having some fresh water is important. Fill a barrel, old bathtub, or some kind of tank before the storm, just in case. If you are along the coast, salt water flooding might be another problem that could hasten dehydration.

Finally, a meeting with neighbors before the storm hits to familiarize them with your place could be helpful. You can’t be sure you will be able to make it home, if you have to evacuate. Having good neighbors who know how to put on a halter, load in a trailer, or give feed and hay could save your horses until you make it back. Tell them how many horses you have and where paperwork might be. Give them your vet’s name and number. Visit their barns, too, so you can reciprocate, if needed.

Oh, yeah, take care of the house, too. We can’t forget the family, dog, lawn furniture, etc. The key is to be prepared and hope we don’t need all the preparations because the storm was not as bad as we were prepared for. That’s always a good thing.

Processing Pig Litters

Tyler Braud, LSU AgCenter 4-H Livestock Specialist

What is processing?

The end of summer/beginning of fall brings football and farrowing season! Many Louisiana swine producers are currently in the process of farrowing litters for the upcoming spring livestock shows. When discussing newborn litters of pigs, the term processing refers to management practices that are done to ensure proper health and growth of the pigs. Common management practices that are part of most processing protocols include iron administration, identification, castration, clipping and treating umbilical cords, clipping teeth, and tail docking. These practices can be performed in any sequence, depending on producer preference. Some swine producers will complete all procedures listed, while others may choose what is appropriate for their particular operation. Processing is typically done within the first few days after birth.

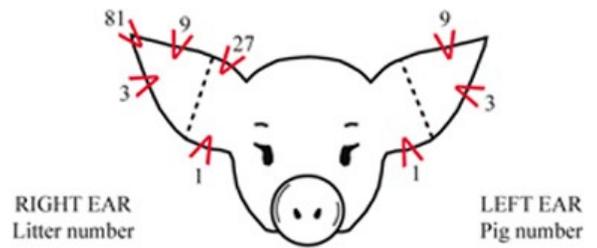
Supplemental Iron

Iron injections are typically given 2-4 days after pigs are born in order to prevent anemia. Iron deficiency anemia can develop rapidly due to low iron reserves in the newborn pig, low iron in the sow’s colostrum and milk, lack of contact with iron in the soil, and the rapid growth rate of young pigs. Iron can be administered orally or by injection. Injection is the preferred method of administration because it is better absorbed by the pig and more likely to reach critical tissues in the desired amount. Injections are typically given intramuscularly in the neck. It is important to read all label directions, as an overdose of iron can be toxic.

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Identification

Ear notching is the most common form of permanent indication used on swine operations. While this may not be necessary on operations that only raise pigs for slaughter, each pig must have a unique ear notch in seedstock herds because it is required for pedigree and performance information. The most common ear notching system can be seen in the picture below. The litter number is notched in the right ear of the pig, and the individual animal number in the left ear. Ear notching is accomplished by using a v-ear notcher designed for pigs.



Castration

Pork from boars typically has a strong odor during the cooking process. This odor is known as boar taint and is unpleasant to most people. To avoid this, males destined for slaughter are typically castrated between 4 and 14 days after birth. Young animals are easier to restrain, bleed less, and have antibody protection from their dam. After castration, pigs must be observed for excess bleeding and hernias.

Umbilical Cord Care

The umbilical cord typically does not require much attention, although it can serve as a source of infection in rare cases. The cord may need to be clamped or tied if excessive bleeding occurs. Iodine should be applied after birth to prevent infection. Once the cord is dried and shriveled, it should be cut leaving it around 1-3 inches in length.

Clipping Teeth and Tail Docking

The newborn pig has eight needle teeth on the sides of the upper and lower jaws. Producers can clip the teeth using side cutters soon after birth to reduce the chance of lacerations on other pigs and the sow's udder. This practice has been eliminated on some operations, or only done on an as needed basis. Tail docking is done to prevent biting and cannibalism. In order to reduce these undesirable behaviors, some producers will dock tails. The tail is docked about one inch from where the tail joins the body. Similar to teeth clipping, producers may only dock tails on an as needed basis.

Summary

While not a comprehensive list, the management practices discussed in this article are commonly done on most swine operations. Producers have the option of tailoring a processing protocol to fit their own operation and no two swine farms do things exactly the same. By getting newborn pigs off to a good start, producers are likely to wean more live pigs.

News from the farm

The LSU School of Animal Sciences is excited to announce that we have farrowed our first litter of pigs in a number of years. Five Hampshire cross sows and one Hampshire cross boar were acquired in September 2017 to enhance our teaching program. Our students now have the opportunity to gain hands-on experience related to swine production through various courses offered in the LSU School of Animal Sciences.



References

Reese, D.E., T.G. Hartsock, W.E. Morrow. 2015. Baby Pig Management-Birth to Weaning <https://articles.extension.org/pages/27050/baby-pig-management-birth-to-weaning>

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Plan for Fall and Winter Nutrition NOW: Cow Nutrition Impacts Calf Health and Herd Productivity for Years

Dr. Christine Navarre, LSU AgCenter Extension Veterinarian

We are approaching the time of year when forage quality is at its worse. In some parts of the state we are already there due to lack of rain. There is quite a bit of research about the impact of nutrition on cow reproduction. More recently, research is clearly showing that the nutrition of a cow while she is incubating a calf, from conception to birth, has a major influence on the calf's future health and productivity. While body condition score does not tell the entire story, it is the most important metric to measure cow nutrition. Here are some of the problems that can be encountered if cow nutrition is lacking during gestation of the calf.

Problems in This Year's Calf Crop

Increased Calving Problems

Weak, under conditioned cows have more weak calves and stillbirths, mostly due to prolonged labor. Weak calves are more likely to get sick and die, and they have decreased performance.

Weak Calves

Birth weights of calves will decrease, as will brown fat storage (important for generating warmth). Both are important for calf vigor and survivability in the short term and reducing sickness and death rates.

Sick Calves

Early in gestation, lack of proper nutrition impacts the proper development the organ systems of the calf. The impact specifically to the lungs leads to more calf pneumonia.

Later in gestation decrease in calf birth weight and vigor increases the chances of calves not getting colostrum in time. To compound this, cows that are nutritionally deprived cannot produce good colostrum. Both of these problems lead to failure of passive transfer (FPT) in calves. Calves with FPT are more likely to get sick and die. Even if calves survive an illness, they do not grow as well as healthy calves.

Vaccine Responses

Cows can only respond to a vaccine if they have proper energy, protein and mineral levels in the diet. If a cow isn't taking in enough protein to maintain her body condition, she can't make antibodies, which are protein, and put them in her colostrum for her calf. Therefore, vaccinating cows to protect calves through colostrum will only work with proper cow nutrition. Calf vaccine response is also poor in calves that don't get adequate colostrum.

Growth

Nutritional compromise during early gestation also decreases the number of muscle and fat cells that develop. This leads to problems with growth and marbling. Tenderness and feed efficiency are also negatively impacted. Genetic selection for growth and carcass traits is important, but we won't realize those improvements if we don't "feed the genes".

Problems in Subsequent Years

Infertility

We've known for years that females in poor body condition don't breed back readily. Letting cows drop to body condition score of 4 instead of maintaining them at 5 can drop conception rates by 15%. As mentioned earlier, calving difficulties also increase in thin cows, which further decreases conception rates and delayed conceptions.

Replacement Heifers

Calves that don't get adequate colostrum, whether or not they get sick, do not grow as well as calves that get good levels of immunity from colostrum. This difference in growth carries through the feeding period in feeder calves. This translates to increased time to breeding and time to mature weight in replacement heifers.

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Lack of proper protein supplementation during pregnancy has been shown to lead to lower average daily gains, delayed onset of puberty and lower conception rates in female offspring. For herds that are retaining replacement heifers, cow nutrition this year can have long-term effects on the reproductive health of your herd. Improper supplementation of heifers has a direct effect on their own future performance, not just that of their calves. It leads to decreased pelvic size, which can affect their dystocia rate for life.

Bottom Line

This all adds up to weaning fewer and lighter calves (less pounds weaned per cow exposed) and poor meat quality in the upcoming calf crop as well as future calf crops. So what do we do?

Develop a Sound Nutrition Program

Much of the grass hay produced here is not adequate to sustain a late pregnant cow, and maybe not even enough to sustain an open or early pregnant cow. So we need a supplementation plan for this fall and winter. To avoid overspending or underspending, we need to develop a supplementation plan based on hay analysis and estimates of how much hay actually needs to be fed. Underfeeding hay is not an uncommon problem.

Measure Success

Some years are worse than others from a weather standpoint (cold, wet, mud, and drought), so we have to continuously monitor body condition to make sure we are supplementing enough. But the one time to measure body condition that predicts future productivity and profitability is at calving. Cows that calve in a body condition of 5 or 6 and heifers that calve in a body condition of 6 are more productive than cows that calve in a body condition of 4 or less. The goal is to keep cows in that middle of the road body condition-not too fat and not too thin. We have to keep them there cost effectively, but if we don't we will suffer major losses, many of which are only noticeable with good records, but they are there nonetheless.

Feeding costs are a major expense so developing a winter feeding program that is cost-efficient is imperative while at the same time making sure nutrient requirements are met. In the words of my colleague Dr. Bob Sager, "Feed smart, not cheap". An investment now will pay dividends for years to come.

Cool-season Grass and Legume Forage Variety Considerations

Dr. Ed Twidwell LSU AgCenter, Extension Specialist

Livestock producers should plan ahead for a winter pasture program that can provide the needed nutrition for their livestock while summer pastures are dormant. If grazing is short, consideration should be given to early planting at least one or more pastures into a prepared seedbed. Early planting of a small grain, or a small grain-ryegrass mixture in a lightly cultivated field, can provide a lot of valuable fall and winter grazing if fall weather is suitable for quick stand establishment and good growth. Even if hay harvesting is good in late summer, winter pastures should be a part of most livestock programs. Following are some comments concerning cool-season pasture crops and varieties that should be considered for planting in the fall of 2018.

To be included on the list of varieties that are considered to have performed satisfactorily from a crop for which several varieties are available, a commercial variety must be tested for three consecutive years and have an average yield not less than 90% of the three-year mean of the top three yielding varieties. A variety will be listed as "Promising" if, following two consecutive years of testing, it has shown acceptable agronomic performance and has yielded at least 90% of the average of the top three varieties. A variety will be dropped from the list if it fails to perform satisfactorily or if it is no longer available to the producers or if not submitted for evaluation.

Ryegrass: Ryegrass is adapted on most soils throughout the state and is the most widely planted cool-season forage crop in Louisiana. It is highly productive in late winter and spring if given good management and weather is suitable. Forage quality is excellent when it is grown either alone or in mixtures with small grains and clovers. Varieties considered to have performed satisfactorily over the past 3 growing seasons and suggested for consideration in 2018 include Diamond T, Double Diamond, Earlyploid, Flying A, Herdsman, Jackson, Jumbo, Maximus, Nelson Tetraploid, Passerel Plus, Prine, RM4L, Spicer, TAMTBO,

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Triangle T, Wax Marshall and Winterhawk. Varieties showing promise include Bashaw Tetraploid, Bashaw Diploid and FrostProof.

Oats: Oats are excellent producers of fall growth and have good forage quality. They are the least winter-hardy of the small grains and stand losses are sometimes observed in rough winters. Varieties suggested for consideration are RAM LA99016, TAMO 411 and TAMO 606.

Rye: Rye is an excellent producer of early fall and winter growth. Its most rapid growth period is in early spring, earlier than ryegrass and other small grains. Varieties suggested for consideration include Elbon, Maton, Maton II, Oklon and Wintergrazer 70.

Wheat: Wheat is a good producer of quality forage in both fall and winter. No commercial wheat varieties have been tested by the LSU AgCenter in recent years. No variety considerations can therefore be made. Producers should consider selecting varieties that are adapted to their local geographical area.

Arrowleaf Clover: Arrowleaf clover is an annual that produces most of its growth in late spring and lasts longer under grazing than small grains and ryegrass. It is best adapted on upland soils and can reseed if allowed to mature a seed crop. Varieties suggested for consideration are Amclo, Meechi, Yuchi and Apache.

Crimson Clover: Crimson clover is highly productive in early spring but goes out early. Like arrowleaf clover, it is best adapted to upland soils. Varieties suggested for consideration are Dixie, Chief, Tibbee and AU Robin.

Red Clover: Red clover is a high yielder in good stands and persists into the summer if conditions are favorable. In some years it survives through the summer on better soils. It can be used for grazing or hay. Varieties suggested for consideration are Kenland, Kenstar, Cherokee, Southern Belle, AU Red Ace and Barduro.

Subterranean Clover: Subterranean clover is a low-growing annual clover that has prostrate creeping stems with erect leaves. Seeds are produced in a bur that develops at or below the soil surface. It has excellent reseeding ability under close grazing, but some reseeding failures have been reported after the initial stand had thrived for several years. It produces most of its growth in the spring slightly later than crimson clover. All of the suggested varieties originated in Australia. In Australia, the maturity is considered to be early for Woogenellup, midseason for Mt. Barker, and late for Nangeela and Tallarook. Woogenellup contains a low to moderate level of hard seed. The others have a low level of hard seed.

White Clover: White clover is adapted to a wide range of soil conditions and has some tolerance to wet soils once it is established. If growing conditions are favorable, it can persist well into the summer. Varieties suggested for consideration are LA S-1, Osceola, Regalgraze, Pinnacle, Durana and Neches.

Berseem Clover: Berseem clover is an annual, upright-growing clover. The varieties suggested for consideration in Louisiana are Bigbee and Frosty.

Alfalfa: Alfalfa is an important hay and haylage crop in many states, but the amount produced in Louisiana is very limited. It requires excellent drainage, highly fertile soils, a near neutral pH and a high level of management. Many varieties are marketed, but only a few are adapted in Louisiana. The only variety suggested for consideration is AmeriGraze 702.

Ball clover: Ball clover is a low-growing winter annual clover. It resembles intermediate white clover. It has excellent reseeding ability. Varieties suggested for planting include Grazer's Select and Don.

Balansa clover: Balansa clover is a cold-tolerant annual clover that is suited to various soil types. Mature plants are tolerant of periods of saturated soils. It has higher nitrogen production than most clovers, and it is a good re-seeder. It matures about two weeks later than crimson clover. The only variety suggested for planting is FIXatioN.

If you have any questions concerning your winter forage program, contact your local Extension agent.

Preparing for Goat Breeding Season

Rodney Johnson, LSU AgCenter, Associate Agent

Sexual Maturity of Goats

The male goat is called a “buck” or “billy.” can weigh anywhere between 100 to 350 pounds, depending on their breed, health and nutritional status. Although they can come into puberty and breed does as early as 4 months of age, waiting until a buck is a year of age to start using him for breeding is best.

At 1 year of age, the buck should service no more than 10 does at a time (in one month). When he is 2 years old, he should be able to service 25 does at a time. At the age of 3 and older, he can breed up to 40 does at one time, as long as his health and nutritional needs are met. The number of does a buck can service at one time also depends on individual sex drive of the buck, the terrain of the land and if he is managed by a hand- or pasture- mating system. The buck has the greatest genetic impact on the herd and should be well taken care of at all times.

Day length has an effect on reproduction in the buck and the doe. Bucks have the highest libido (sex drive), fertility, and semen quality and volume in late summer and fall. As the day length, gets longer, less sperm is made and more abnormal sperm cells are found in the semen. During the fall, the endocrine system also increases levels of the sex hormones, testosterone and luteinizing hormone.

The Doe

The female goat is called a “doe” or “nanny.” The doe can reach puberty between 4 to 12 months of age, depending on the breed, season of birth, level of feeding/nutrition, and overall health status. Under-feeding can lower her chances of getting pregnant and having kids and can also reduce milk production after having kids. Puberty is reached when the female exhibits her first heat (estrus) and ovulation.

The environmental cue most dominantly affecting seasonal breeding in small ruminants is the annual change in day length (goats are considered short day breeders). Seasonal anestrous occurs when the day length increases and this period is associated with an absence of estrus and ovulation and decreased secretion of the reproductive hormones.

Estrus, or heat, is the period in which the doe will stand and allow the buck to breed her. This phase of the reproductive cycle may last between 12 to 36 hours. The period from one heat cycle to the next is referred to as the estrous cycle. In goats, the estrous cycle occurs every 18 to 24 days, or 21 days on average. Does that are in heat may exhibit signs of mucous discharge from the vulva, swollen vulva, bleating, frequent tail wagging, pacing down the fence line and standing in heat. The doe can be bred when she has reached 60 percent to 70 percent of the average adult weight for her breed. Does that are bred too early may have problems during kidding (dystocia - kidding difficulty), and/or their future reproductive performance may be harmed.

The gestation period, or length of pregnancy, of the doe ranges between 145 to 152 days, or 150 days (5 months) on average. The doe can have multiple births (twins, triplets and rarely, more)

Preparing for breeding season

- Provide additional feed to does and ewes one to two months prior to the breeding season. Supplement the females with 0.5 pound of concentrate or grain per head, per day to improve body condition and ovulation rates.
- Two to three weeks prior to the breeding season
 - Deworm the does using targeted selected treatment such as FAMACHA.
 - Vaccinate the females with C&D tetanus toxoid.
 - Check and trim the goat’s hooves if needed.
 - If planning for artificial insemination (AI), plan estrous cycle synchronization prior to this time.
- Breeding Day
 - Breed does with BCS between 5 and 6 or 3 to 3.5 for dairy goats.
 - Place the buck with the does for two estrous cycles, or 42-45 days and then remove him, or AI
 - At least ten days after the last AI, put a "clean-up" buck in with does to breed ones that did not get pregnant from AI
 - Record breeding date, breeding weight

Should a Beef or Dairy Producer Plant Ryegrass for Grazing with the High Input Cost?

Dr. Charles Hutchinson, LSU AgCenter, Extension Specialist

The LSU AgCenter annual ryegrass performance information on 17 different commercial varieties excluding Gulf Ryegrass from three different locations and means for the past three years are below:

	Dry forage, lb/acre		
	<u>Mean</u>	<u>Low</u>	<u>High</u>
Franklinton	9,113	7,875	10,471
Iberia*	11,059	10,312	11,659
Winnsboro	6,239	5,856	6,684

*Only data from two growing seasons from Iberia

Let's take for example the Winnsboro mean of 6239 lb dry forage/acre or 3.112 tons of dry forage/acre and assume a conservative utilization of 60% since clipping results do not always equate to grazing performance as well as other factors such as pest, disease, overgrowth, etc. This would yield 1.872 tons of dry forage/acre. If the average input cost per acre for ryegrass is \$165.00. Then the cost of ryegrass would be \$0.044/lb dry matter. It is difficult to buy or grow any type of feed for less than 5 cents per lb of dry matter. We will assume that the ryegrass will average 20% CP and 68 TDN across the growing season.

How will bahiagrass hay compare to ryegrass on a cost basis and nutrient basis?

Roll of Bahiagrass hay weighing 1,000 lb cost \$30.00 per roll and contains 6.0% CP and 47 TDN on a dry matter basis. Using the same situation as above except at 70% utilization for the hay:

1,000 lb @ 88% DM equals 880 lb dry matter. At 70% utilization you would have 616 lb of dry matter at a cost of \$0.048/lb of dry matter of bahiagrass hay.

How much ground corn, cottonseed meal 41 or soybean meal 48 and bahiagrass blended together would it take to equal a lb of dry matter that is 20% CP and 68 TDN? More importantly what would the cost be of this combination?

	As is Cost	Cost/lb DM
Ground Corn	@ \$226.00/ton	\$0.128
CSM 41	@ \$300/ton	\$0.163
SBM 48	@ \$420/ton	\$0.228

	As is (lb)
Ground corn	0.347
CSM 41	0.355
Bahia Hay	0.420

This would yield 1.0 lb dry matter at a cost of \$0.11/lb dry matter at 20% CP and 68 TDN

	As is (lb)
Ground corn	0.313
SBM 48	0.295
Bahia Hay	0.525

This would yield 1.0 lb dry matter at a cost of \$0.12/lb dry matter at 20% CP and 68 TDN

Based on these calculations and assumptions, ryegrass for grazing beef cattle, growing calves and dairy cattle is still one of the more economical feedstuffs available even with the higher input cost of seed, fuel and

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fertilizer. Obviously, there is more risk involved in growing ryegrass from a disease (Blast and Crown Rust) pest (army worms, wild hogs and deer) and weather (too much or not enough rain, freezing temperatures) as compared to feeding a stored forage such as hay and concentrates such as corn, cottonseed meal or soybean meal but the cost per lb of dry matter and the yield potential in nutrients is difficult to beat.

I did a couple of quick rations looking at ryegrass grazing cost compared to the bahiagrass hay using the same prices as before. The rations were 23.50 lb – 24.00 lb of DMI intake with 12% CP and 58 TDN on a Dry Matter Basis. This ration would support a 1,200 beef cow in early lactation.

Lb as is
18.40 Bahia grass hay
5.20 ground corn
3.50 cottonseed meal
Cost per cow per day: \$1.66

Lb as is
48 ryegrass grazing @ 20% DM with 20%CP and 68 TDN
14 Bahia grass hay
1.70 ground corn
Cost per cow per day: \$1.05

Of course there are some logistics problems, with limit grazing and the nutrient content of the ryegrass will vary from time to time, but the potential of saving \$0.61/cow/day and meeting her nutrient requirements might be worth the problems. Some people will probably let them graze more ryegrass and not supplement anything except some hay. They will receive more protein than needed but will be able to meet their energy needs without additional supplementation. As long as the cost of this is less than \$0.61 per day you would still be ahead.

Obviously, the better quality hay that you have and if you have adequate supply and it is stored properly, then ryegrass grazing would probably not look nearly as attractive as someone that does not have enough good quality hay.

To me the most important things a producer should do this year if they are considering to plant or not to plant ryegrass this year are:

1. Take an inventory of the stored forages they have and determine their forage needs
2. Get a nutrient analysis of the stored forages and determine the amount of nutrients needed from supplements and/or byproducts
3. Get soil samples of the land for ryegrass and determine the amount lime and fertilizer that will be needed
4. Determine the current cost in their area of seed, lime and fertilizer needed.
5. Price by-products and supplements that will augment the forage nutrients to meet the cow's requirements.

Of course these are not new recommendations concerning wintering beef cattle, but with margins tight in both the beef and dairy industries following these recommendations might add some additional revenue to your operation.

Beef Cattle Synchronization

Dr. Tim Page, LSU AgCenter Extension Specialist

Beef cattle synchronization is the attempt to bring all cycling females of a particular group of cattle to the same reproductive cycling point (estrus) through hormonal manipulation.

Why would someone want to synchronize a group of females? There are a number of advantages to synchronization including a concentration of labor, reduce length of breeding season and therefore calving season, and the incorporation of artificial insemination (AI) to increase genetic quality of the herd. Reducing the length of calving season opens up more avenues for utilizing different marketing strategies as well as reducing rebreeding time post calving. The use of AI allows the introduction of superior genetics as well as reducing the need for bull power.

Most cattle synchronization involves the manipulation estrous using hormones. Some of the hormones commonly used in cattle synchronization are progesterone (MGA, CIDR), PGf2 α (prostaglandin, lutalyse, regression of CL) and GnRH (allows for better timing of AI). What type of synchronization protocol is the right one? There is not an easy answer to that question. There are literally hundreds of protocols. The method that works the best for each producer is highly dependent on a number of factors such as: facilities, available labor, body condition of females, post calving intervals and fertility levels of the cows.

The use of CIDRs has become one of the most common methods of synchronization. It employs a controlled internal hormone release and many protocols incorporate CIDRs. It is inserted into the vagina and removed easily with an attached flexible tail.

The use of synchronization does not eliminate the need for natural service. After AI, producers must clean up breeding not pregnant females with bulls. Normally, the conception rates using AI run between 50%-60%. Usually with a 30 day breeding season with clean up bulls producers can expect a 75%-95% conception rate. A 60 day clean up with bulls usually results in an 85%-95% conception rate.

There are many advantages to utilizing cattle synchronization as well as many different synchronization protocols. Producers must make these management decisions based on the type of cattle, herd size, labor force, operating system, facilities, grazing system and nutrition program. Remember: The number one factor for reproductive efficiency is nutrition and nutrition level of the herd is determined by body condition scores.



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