



Angus Advisor

► NOVEMBER herd management tips

Southeastern Region

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General recommendations

Evaluating forage availability. Pasture nutrient yield has an important influence on animal performance, but it is often difficult to define and measure. This time of year, forage availability can become a limiting

factor in many beef cattle nutrition programs. Many of the decisions a beef cattle producer makes are related to the management of the available forage resources. Knowing the forage dry-matter yield of ranch acreage is important for making decisions about crop productivity, purchasing or selling hay, pasture fertility, grazing schemes, stocking rates and supplementation programs.

Clipping and weighing the forage in a given area is the most accurate method of assessing available forage but requires drying and weighing clipped forage. A falling plate meter measures the height of forage while it is depressed with a weighted plate. It takes density into account and is therefore more accurate than measuring the height. Measuring the height of existing forage using calibrated rulers is usually an easy method, but it is less reliable because it does not take stand density into account.

A trained observer can visually estimate forage availability for different forage crops, but this method lacks precision and requires a very knowledgeable observer. Electronic equipment is commercially available for a moderate investment that can be pulled behind an ATV and used in conjunction with computer software to assess forage availability and make management decisions based on that information. Contact a local Extension office to discuss these options.

Nutritional management. Modify winter supplementation needs based on the forage situation. Watch pasture conditions as residual summer growth and crop residues are grazed off, and start offering hay before forage availability becomes limiting. Watch nutrition closely when grazing stalks and stubble, and be prepared to supplement. Do not feed urea on soybean stubble. In annual ryegrass stands, keep a close observation on plants for blast. Warm, humid conditions following hurricanes, tropical storms or other rainfall events increase the likelihood for blast. Protein supplementation may be needed on residual summer grazing such as stockpiled Bermuda grass.

It is not too late to test the quality of stored forages and order winter supplements. Review forage test results, inventory hay supplies, and determine if additional hay is needed. This is a good time to service forage harvesting and feeding equipment. Continue

watching commodity prices, and purchase supplemental feed for winter as appropriate. Corn and cotton products are often less expensive in the autumn. Match forage and feeding programs to the nutritional needs of each group and forage analysis results. Watch body condition, and group the herd into winter-feeding groups such as mature cows with average condition, thin mature cows, and first-calf heifers.

Stocker operators should remain flexible in determining the number of head to purchase and then stock pastures according to current and projected available forage amounts. Portable electric fencing is an excellent tool for implementing rotational-grazing, limit-grazing, strip-grazing or creep-grazing systems. MiG systems are essential for stretching forage supplies and associated expense outlays to improve profit margins. Provide proper mineral supplementation and fresh water at all times, checking these supplies often.

Follow up on cool-season forage program implementation. Graze or clip pastures closely where winter annuals will be overseeded before planting. Plant and fertilize cool-season forages if not already accomplished. Potassium fertilization is critical for Bermuda grass fields going into autumn and winter. Using soil tests for fertilization program planning can help optimize fertilizer investments. Apply lime as indicated by soil analysis results to make the most of fertilizer applications.

Health management. As the weather cools down, watch for lice and treat cattle as needed. Remove any remaining insecticidal ear tags as they can release low levels of insecticide and promote the development of resistant flies. Follow up on internal parasite control practices, as they are another important component in a complete herd health program developed in consultation with a veterinarian. Check cattle for cancer eye and foot rot. BQA-consistent practices should be included in the health program. Vaccinate all calves more than 3 months old for blackleg. Consult with a veterinarian for state guidelines on calfhooed Bang's vaccination programs for heifers. Deworm and implant stockers as appropriate.

Many states offer disease monitoring and certification programs for beef cattle operations. Johne's disease and PI-BVD

Guide to abbreviations and acronyms

To make the "Angus Advisor" more concise and consistent, we have used the following abbreviations or expressions:

\$Values	dollar value indexes
ADG	average daily gain
AI	artificial insemination
AIMS	Angus Information Management Software
BCS	body condition score
BLV	bovine leukemia virus
BMP	best management practices
BQA	beef quality assurance
BRD	bovine respiratory disease
BRSV	bovine respiratory syncytial virus
brucellosis	Bang's disease
BSE	bovine spongiform encephalopathy
BVD	bovine viral diarrhea
Ca	calcium
CHAPS	Cow Herd Analysis and Performance System
DM	dry matter
EPD	expected progeny difference
FMD	foot-and-mouth disease
GnRH	gonadotropin-releasing hormone
IBR	infectious bovine rhinotracheitis
ID	identification
IM	intramuscular
in.	inch
lb.	pound
lepto	leptospirosis
Mg	magnesium
MiG	management-intensive grazing
MLV	modified-live virus
N	nitrogen
P	phosphorus
PI	persistent infection
PI ₃	parainfluenza-3 virus
preg-check	pregnancy-check
Se	selenium
sq. ft.	square feet
SPA	Standardized Performance Analysis
TB	bovine tuberculosis
THI	temperature-humidity index
trich	trichomoniasis
Zn	zinc

programs are examples of animal health programs available in the region. Ask a local or state veterinarian about available state animal health programs.

Apply for a ranch premises ID number from the state veterinarian's office if not already done. This is a key component of disease and disaster preparedness for beef cattle operations throughout the entire region. Producers with valid premises IDs should consider use of official 840 ear tags for animal ID.

This is the last month of the Gulf Coast and Atlantic Coast hurricane season. Stay vigilant. Work to develop a ranch-level disease and disaster preparedness plan. Local Extension agents and veterinarians can assist in these planning efforts.

Marketing and financial management.

With input prices remaining relatively high, managing operations based on unit cost of production is critical. Small- and large-scale producers may benefit from forming alliances with neighbors for group cattle marketing and bulk input purchase endeavors.

Continue good production and financial recordkeeping. As the calendar year draws closer to an end, make any final plans for ranch expenditures and marketings based on resource and cash flow considering the effect on upcoming income taxes.

Enterprise budgeting and cash flow analyses are worthwhile exercises. The information from these budgets and reports can be used to make knowledgeable production and marketing decisions. Take advantage of feeder-calf marketing programs such as AngusSource.®

Spring-calving herds

Calf preconditioning, weaning and marketing. Check weaned calves regularly for health problems, and make sure the nutritional program is providing adequate gains. Report weaning data on registered cattle to breed associations in a timely manner. Use weaning performance reports in both seedstock and commercial operations in determining which cattle to retain and which cattle to market. If culling is not complete, it should be finished this month. Identify, cull, and replace bulls that have sired calf groups that are well below the herd average for economically relevant traits. Monitor herd nutritional status through cow BCS at weaning. Review weaning percentage (calves weaned per cow exposed to breeding) and cow efficiency (calf weight per cow weight).

Implement calf preconditioning, marketing or retained ownership plans as appropriate considering seasonal price risks and breakevens on calves. Run a breakeven analysis on retained ownership options, including stocker and finishing programs,

Midwest Region

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Herd management for spring-calving cows

1. Pregnancy-check if not already completed.
2. Consider feeding cull cows to increase body weight and value. Minimize cost of gain. Use of biotechnology has shown dramatic effects on rate of gain, cost of gain, and carcass composition. Young cows seem to have greater average daily gains and feed efficiency than older cows.
3. Score cows for body condition. Provide thin cows (BCS 3 and 4) extra feed now. Take advantage of weather, stage of pregnancy, lower nutrient requirements and quality feedstuffs.
4. In late fall and early winter, start feeding supplements to mature cows grazing dry grass using these guidelines:
 - (a) 1-2 lb. per day of a 40% CP supplement;
 - (b) 3-4 lb. per day of a 20% CP supplement; or
 - (c) 10 lb. good nonlegume hay, no supplement needed.
5. Compare supplements on the basis of cost per pound of nutrient.
6. Utilize crop residues. Graze efficiently. Cows with average body condition can be grazed at 1-2 acres per cow for 30 days, assuming normal weather. Available forage is directly related to grain production levels. Protein, phosphorus (P) and vitamin A are usually the limiting nutrients.
7. Discontinue feeding tetracycline if used for anaplasmosis control.

Calf management

1. Submit data to Breed improvement Records, AHIR/BRS programs, and/or other ranch record systems.
2. Finalize plans to merchandise calves or to background through yearling or finishing programs.
3. Use AIMS to record calf data.

Forage/pasture management

Plan a winter nutritional program through pasture and forage management.

General management

1. Document the cost of production by participating in SPA programs.
2. Review management decisions, and lower your costs per unit of production.
3. Plan your marketing program, including private-treaty, consignment, test and production sales, etc.
4. A penny saved is a penny earned. Price byproducts, grains and other feedstuffs on a nutrient basis.

and consider risk management strategies before finalizing marketing plans.

Calf-verification programs may be an attractive option for feeder-calf marketing. Prepare for special feeder-calf sales as appropriate. Breeders should share information on breed association-sponsored feeder-calf marketing programs with bull customers to help in marketing their calves.

Breeding herd management. Finish cow culling based on pregnancy status, soundness (eyes, udders, feet, legs and teeth), health status and performance records. Develop plans for marketing cows based on market conditions and cow body condition. This time of year is often an ideal time to market cows and bulls. Manage market cows in keeping with BQA guidelines.

Establish permanent ID (tattoos or brands) for bred heifers that will remain in the herd, and make plans to market open heifers.

Start ordering calving supplies now so they will be on hand in time for calving. Check

bred heifers frequently. Calving may begin in December in many herds if bred ahead of the mature cow herd.

Allow bulls to rest and regain condition in small pasture traps on an adequate nutritional program. Market bulls that will not be used in future breeding seasons. Start identifying needs for herd sire replacements, and consider purchasing bulls at upcoming sales.

Nutritional management. Continue a heifer development program, keeping an eye on declining forage quality and availability and monitoring heifer weights on a monthly basis. Replacement heifers will likely need to continue to grow at a rate of 1 to 1.5 lb. per day to meet target breeding weights in early spring.

Separate bred heifers from the cows, and provide adequate supplemental nutrition as autumn forage quality declines. Monitor body condition closely for the entire herd, and supplement thin cows and heifers as

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needed. Feed lower-quality hay to dry, pregnant cows, saving the best hay for calving season.

Continue to monitor bull body condition to make sure bulls are in good condition (target BCS of 6) at the start of the next breeding season. Provide additional nutrients to thin or growing bulls. Implement a nutritional program to get thin cows in proper body condition before next calving. It may also be beneficial to add weight and condition to cows identified as culls before marketing them.

Fall-calving herds

Calving management. Fall calving is wrapping up for many herds in the Southeast. Tag, castrate, dehorn and implant calves as appropriate, and keep good calving records. Continue to observe remaining late-gestation fall-calving heifers and cows frequently. Manage these females in calving pastures near cattle handling facilities. After calving, move cow-calf pairs to clean pasture to minimize calf health risk. Restock calving supplies, including calf ID tags as needed.

Yearling management. Cattle may be

nearing the end of yearling data collection age windows. Schedule yearling data collection right away if not already accomplished. Weigh yearling cattle and collect other yearling data such as hip heights, scrotal circumference measurements, temperament scores and ultrasound body composition data. Schedule an ultrasound field technician well in advance of needing this service. Report complete yearling data to breed associations in a timely manner. Use the resulting yearling performance reports to further cull yearling cattle.

Yearling cattle are still growing and should continue to be managed to meet their nutrient needs. Reserving higher-quality forages and feedstuffs for growing cattle is warranted.

Breeding herd management. Consult with a veterinarian for scheduling prebreeding vaccination needs if not already done. Continue to monitor heifer development by checking weights and adjusting nutrition to meet breeding targets. Breeding begins this month and next month for most herds. Begin breeding heifers three to four weeks before the mature cow herd.

Providing good nutrition for lactating cattle approaching breeding is critical for reproductive success. Cow nutrient needs

increase dramatically after calving. Make sure lactating cows are in good condition for breeding. Replacement heifers should be nearing 65% of their expected mature weight. Start feeding a high-magnesium mineral supplement about 30 days before lactating cattle are turned out onto lush winter annual or tall fescue pastures.

Finalize herd sire plans for the rapidly approaching breeding season. Plan for herd sire needs by evaluating the existing herd sire battery and arranging breeding soundness exams. Continue maintaining bulls in small pasture traps with effective fences, and manage them to start the upcoming breeding season in good condition. Consider sources of bulls with performance information. Request information on upcoming bull sales. Order semen and breeding supplies as soon as possible if not already done.

Southern Great Plains

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Spring-calving herds

1. Wean calves as soon as possible, if not already done. Cow milk production is at its lowest point in the lactation curve, and forage quality rapidly declines through the fall months. As a result, adjusted weaning weights generally decline for calves that

are weaned late in the season.

Furthermore, under most circumstances, cows will continue to lose condition until the energy demand for milk production is removed.

2. For cows grazing forage that contains less than 7% protein, begin supplementing the equivalent of about 0.4 lb. of protein per day. This is approximately equivalent to feeding 1 lb. of a 38% protein product or 2 lb. of a 20% protein product. This strategy will increase forage intake and digestibility, allowing the cattle to harvest 25%-50% more energy from the forage resource. As a result of this tremendous response, cows should gain one-half to one full BCS before the end of the year, assuming they have access to abundant forage.
3. Depending on forage quality, retained heifer calves will likely require supplementation in order to achieve gains of 1-1.5 lb. per day. The most appropriate and efficient supplementation program can only be designed with the nutritional characteristics of the forage resource in mind. For example, high-quality forage, such as wheat pasture, will not require

protein or energy supplementation. In contrast, high-quality prairie hay may require up to 1.5% of body weight of supplemental feed to achieve the desired level of gain.

4. There is much interest in feeding fat to beef cattle (generally through supplements) to increase weight gain and achieve improved reproductive performance. Published experiments have failed to document consistent positive responses to fat supplementation in general. However, the research is more consistent in demonstrating that too much ruminally active fat can hinder intake, forage digestion and weight gain in general. Under most circumstances, forage-fed cattle should receive diets that contain no more than 4%-5% total fat. Many forages contain 1%-2% fat, leaving room for a maximum of 2%-4% supplemental fat.

Fall-calving herds

1. Lactating, fall-calving cows should receive approximately twice the amount of supplemental protein as the spring-calving cow herd. The goal for the supplementation program is to minimize weight loss through the breeding season so cows are able to maintain moderate condition through this period. Moderate

weight and condition loss after breeding will not compromise the pregnancy.

2. If not done in October, brand calves and vaccinate for clostridial diseases. Vaccinate cows for reproductive diseases according to your herd health plan.
3. Prepare for the breeding season by purchasing semen, checking, repairing and cleaning breeding equipment and facilities. An excellent resource for up-to-date information on various heat synchronization schemes is available in the following fact sheet: ANSI-3166 "Synchronizing Heats in Beef Cows and Heifers." It can be accessed at <http://pods.dasnr.okstate.edu/docushare/dsweb/HomePage>.

General recommendations

1. Most of this region has been fortunate to have an excellent forage production year. In fact, most producers find themselves with abundant new-crop hay and a lot of hay carried over from the 2007 harvest. While this year's hay crop is good quality in general, last year's hay crop was mature and much of it was damaged by rain during harvest. For example, average TDN (an estimate of digestibility) for prairie hay harvested from four large meadows in

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2007 was 49%. In 2008, prairie hay harvested from those same four meadows averaged 58% TDN. Too bad we can't just make ethanol out of the leftover 2007 crop!

The low-quality hay should be fed during times when the animal's nutrient requirements are low, such as the dry period during mid-gestation in a spring-calving cow herd.

2. Discontinue feeding tetracycline for

anaplasmosis control after the end of the vector season (30-50 days after a hard freeze).

3. Check with your Extension office for information on educational meetings about livestock and forage production practices.
4. Lightly graze native hay meadows after frost. Remove cattle from meadows in wet conditions.
5. Use prescribed fire every other year in dry leaf litter to control hardwood sprouts (less than 4 in.). Fire will also reduce winter tick infestations.

Western Region

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The main focus is to prepare for the breeding season.

Genetic management

Sire selection. Devote as much time as possible to sire selection because from a long-term standpoint it is the most important management decision that is made each year in a purebred cattle operation. The difficult aspect is figuring out which sires of the ones available today are going to produce the kind

of daughters that will be the most productive and sought after three to five years down the road. Many times sires are used because they will produce bull progeny that will be more marketable from a phenotypic and genetic standpoint. That is fine; however, it is hard to justify the time and expense associated with AI if daughter progeny are not the kind of females that will improve your cow herd.

Reproductive management

Semen. Get semen ordered early to avoid last-minute problems. Do not try to save money on semen, as cheap semen is the most expensive item you can ever buy. If

you can't afford to use the best bulls available, then just turn out bulls. They will probably do you more good in terms of herd improvement.

Synchronization protocol. Evaluate available synchronization protocols and determine the one that is going to work best in your production situation. Use a calendar and get all the important dates figured out far in advance of the start of the breeding period, working backwards from the desired first day of the breeding period.

Avoid programs that require excessive amounts of animal handling and trips through the chute prior to breeding. With

these systems, labor and product costs do add up, and both cows and calves are stressed each time they are gathered for processing.

In my opinion, we have given up on some old synchronization protocols that worked very effectively and were very cost-effective. In some operations, timed-AI systems are the only synchronization protocols that are practical. However, in situations where heat detection is an option, AI pregnancy rates are sacrificed when a timed-AI system is used vs. AI combined with heat detection.

Heat detection. Heat detection is often the most overlooked factor influencing the

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success of an AI or ET program. Heat detection is not just catching the cows in standing heat — anybody with a small amount of training can be effective in determining standing heat, or estrus. Effective heat detection is achieved by developing the skills or ability to be able to pick up all the subtle signs of heat and being able to catch the females that never do exhibit standing estrus.

AI equipment. Have extra AI supplies on hand and thoroughly clean and disinfect all breeding equipment (including the thaw thermos) prior to the start of the breeding period. Sanitation is one of the small details that is often overlooked and that can significantly influence conception rates. In addition, be sure to check the temperature of your thaw thermos prior to first use and keep water clean during the AI breeding period.

Semen and trich test. Semen-test and trich-test bulls far enough in advance of the breeding season that if problems arise, replacement bulls can be located prior to the time they are needed for natural service.

Nutritional management

Mineral supplementation. Be sure that cattle are receiving adequate levels of calcium, phosphorus and trace minerals that are deficient in your area. Minerals should be supplemented on a year-round basis and can be varied depending on the time of the year and available forage resources. Mineral boluses or injectable products can be used in addition to loose or block mineral products.

Protein supplementation. If cows are grazing dry native forage, fall is the time of the year that protein supplementation is most important. Block or liquid supplements are good options if dry forage is available or if low-quality hay is being fed to replace dry forage. Good-quality alfalfa hay is an excellent source of high-quality protein; however, the cost of such hay is a problem this year. The old timers always said, “The cheapest hay you can feed is the most expensive hay that you can afford to purchase.” Price supplements on a cost per unit of protein or energy depending on which nutrient is most limiting in your situation.

Energy balance. Energy balance is the relationship between the amount of energy that is consumed vs. the amount that is used for various physiological functions such as maintenance, lactation and reproduction. It has a major affect on fertility. It is critical that cows are in a state of positive energy balance or gaining weight during the breeding season.

The best way to determine energy balance

is to monitor body condition. The target level of body condition for beef cows at calving is a minimum BCS of 5 on a scale of 1 to 9.

Ideally, this level of condition should be maintained during the breeding season. However, many times this is difficult to do cost effectively, especially with cows that have high levels of milk production and tend to lose weight or condition during lactation. (For information on how to condition score cows, including examples, visit www.cowbcs.com.)

Health management

Vaccinations. Make certain that females are vaccinated at least 30 days prior to the start of the breeding period. At a minimum, females should be vaccinated for the respiratory disease complex, the five serotypes of leptospirosis, and the clostridial diseases. I would recommend that you use vaccinations that include fetal protection against PI-BVD. Bulls should also be vaccinated for vibriosis in addition to those diseases described above.

Treatment protocol. Have a treatment protocol on hand for scours and pneumonia in suckling calves. It is well-advised to have first- and second-treatment options for both conditions, and be sure that protocols have been communicated to the appropriate personnel. Health records are becoming more important each year. Vaccination records can be recorded on a group basis; however, treatment records should be kept on an individual animal basis.

Spring-calving herds

The main focus is to keep weaned calves healthy — cows are on cruise control.

Reproductive management

Pregnancy-check. Cows should be preg-checked if not already done. Avoid holding over open cows even if they have been excellent producers as typically the problem will re-occur. In addition, if very many open cows are held over, they steal the profits from the cows that are doing their job and weaning a calf. If the reason for cows being open is a bull or semen problem, then that is an entirely different situation.

Nutritional management

Mineral and protein supplementation. The comments concerning mineral and protein supplementation for fall-calving cows discussed earlier also apply to spring-calving cows at this time of year. However, it is not as important that spring-calving cows maintain or improve body condition.

Body condition. Monitor body condition of cows; however, the period from weaning until 50 days prior to the next calving is the least important from a nutritional standpoint. Therefore, if you want to let cows slip in terms of body condition, that is fine provided that body condition is redeposited before the start of the next calving period.

Heifer and bull development. The developmental period from weaning until yearling time and beyond to the start of the breeding period is critical in terms of influencing the future productivity of both bulls and heifers. Both sexes need to be developed at adequate rates so that differences in terms of genetic potential for growth can be exhibited. However, neither sex should be developed at extremely high rates, as excessive fat deposition can hinder future reproductive performance and detrimentally affect foot and leg soundness. In our own developmental program here at the university, our target levels for ADG from weaning until yearling measurements are recorded is 1.5-1.75 lb. per day for heifers and 2.5-3.0 lb. per day for bulls.

Health management

Weaned calves. Weaned calves should be treated to control any internal or external parasites. Heifer calves should be brucellosis-vaccinated if not already done, and both bulls and heifers should be PI-BVD-tested if that is part of your animal health management program.

The comments concerning treatment protocols for fall-calving herds also apply to spring-calving herds. However, the disease of the highest concern is BRD in weaned calves. The first 30 days after weaning is the most critical period. If the difference in temperature from the daily maximum to the nighttime low exceeds 40°, watch out because you will have problems even in the best of conditions. If calves are exposed to dusty lots, run a sprinkler. It will more than pay for itself.

Pregnant cows. If late-term abortions have been a problem in the past, consider booster vaccinations for the respiratory diseases and leptospirosis at pregnancy-check time. Some producers may be vaccinating only at pregnancy-check; however, we prefer to vaccinate between calving and breeding and then re-vaccinate at weaning and preg-check for diseases that are a problem.

