Angus Advisor

▶ **AUGUST** herd management tips

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 synctial virus
brucellosis	Bang's disease
BSE	bovine spongiform encephalopathy
BVD	bovine viral diarrhea
Ca	calcium
CHAPS	Cow Herd Analysis and Performance System
CP	crude protein
cwt.	hundredweight
DM	dry matter
EPD	expected progeny difference
ET	embryo transfer
FMD	foot-and-mouth disease
GnRH	gonadotropin-releasing hormone
IBR	infectious bovine rhinotracheitis
ID	identification
IM	intramuscular
in.	inch
lb.	pound
LCT	lower critical temperature
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
TDN	total digestible nutrients
THI	temperature-humidity index
trich	trichomoniasis
Zn	zinc

Mid-South Atlantic Region

*by **Scott Greiner**, sgreiner@vt.edu; and **Mark McCann**, mark.mccann@vt.edu; extension beef specialists, Virginia Tech*

The arrival of August signifies that we are on the last leg of summer weather. With that comes a list of chores to accomplish during the month. Near the top of the list needs to be preparation and fertilization for stockpiling of tall fescue. This would include removal of existing forage through grazing or clipping, fertilization with a minimum of 45 lb. of nitrogen per acre, and resting for as long as possible. The additional forage growth accumulated through stockpiling is a great way to reduce winter hay feeding and provide superior nutrition.

Another key chore is to evaluate current pasture conditions for spring-born calves. The primary determinant of calf performance during the last 30-60 days prior to weaning is pasture quality. Moving the herd to better grass or allowing calves access to creep feed are options. This year's combination of affordable feed prices and high calf prices are particularly attractive for creep-feeding. Typical feed-to-gain conversions of creep diets usually are around 8 lb. of feed per 1 lb. of gain, so cost of feed and value of added gain need to be evaluated before committing to this management strategy.

Beyond the potential value of additional weight gain, training calves to eat feed pays dividends later if calves are retained and preconditioned at home prior to marketing. While high levels of creep intake might be economical, moderate levels of intake are more desirable due to enhanced efficiency of gain and avoiding calves becoming too fleshy, which may impact feeder-calf price. After calves begin eating 2-3 lb. per head per day, intake can be moderated through the inclusion of 2%-3% white salt in the creep diet. Taking time to address these key August chores will pay dividends in the fall and winter.

Spring-calving herds (January-March)

General

- ▶ End breeding season early in the month (if not already completed).
- ▶ Make plans for marketing of calf crop. Plan early to time weaning, vaccination program and weaning management in concert with marketing plans. Calculate breakevens on various marketing options and consider risk-management strategies.
- ▶ Begin planning for winter by evaluating feed and forage supplies and options.

Nutrition and forages

- ▶ Continue to manage first-calf heifers separately; give them the best forage and supplement.
- ▶ Continue to feed high-selenium trace-mineral salt. A forage analysis can reveal which other minerals should be supplemented.
- ▶ Continue to manage growth of warm-season grass pastures by rotational grazing.
- ▶ Store your high-quality hay in the dry.
- ▶ Collect and submit forage samples for nutrient analysis.
- ▶ Reserve high-quality hay and a pasture area for calves postweaning.

Herd health

- ▶ Continue parasite and fly-control program for herd. Monitor fly numbers to ensure tags are still effective.
- ▶ Finalize vaccination and preconditioning protocol for the calf crop. Administer preweaning vaccinations.

Reproduction

- ▶ Make plans to preg-check heifers as soon as possible after bull removal. This will allow options in marketing open heifers.
- ▶ Remove bulls after 60 days for a controlled calving season.
- ▶ Schedule preg-check of cow herd with veterinarian.

Genetics

- ▶ Collect 205-day weights on calf crop at appropriate time (AHIR® age range is 120-280 days), along with cow weights, hip heights and body condition scores (cow mature size data taken within 45 days of calf weaning measure).

Fall-calving herds (September-November)

General

- ▶ Prepare for calving season by checking inventory and securing necessary

supplies (obtain equipment, tube feeder, colostrum supplement, ear tags, animal health products, calving book, etc.)
- Begin planning for winter by evaluating feed and forage supplies and options.

Nutrition and forages
- Continue to feed high-selenium trace-mineral salt.
- Condition-score bred females. Plan nutrition and grazing program based on BCS. This is the most efficient period to put weight and condition on thinner cows prior to calving.
- Evaluate growth and development of replacement heifers. Adjust nutrition and management to achieve 65% of mature weight by breeding season. Low levels of protein supplementation can be effective in stimulating performance if forage has become mature.
- Reserve high-quality hay and a pasture area for cows postweaning.
- Manage growth of warm-season grass pastures by rotational grazing.
- Store your high-quality hay in the dry.
- Collect and submit forage samples for nutrient analysis.

Herd health
- Administer mid-summer deworming on replacement heifers and pregnant heifers.
- Continue parasite- and fly-control program for herd.

Genetics
- Identify replacement heifers. Utilize available tools, including genetics, dam performance, individual performance and phenotype. Restrict replacement heifer pool to those born in defined calving season.
- Evaluate bull battery and begin planning for the breeding season by evaluating herd goals and objectives.

Midwest Region

*by **Justin Sexten**, University of Missouri, sextenj@missouri.edu*

Beef Nutrition

As state fair season begins, so should autumn pasture planning. Success of autumn forage programs are often dependent on

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being prepared for late-August, early September "state fair rains." Most fall forage is grown between Sept. 1 and Oct. 15, so August is the best time to prepare pastures to take advantage of this timely moisture.

For those looking for fall and winter grazing options with permanent pastures, consider stockpiling tall fescue. For best results choose pastures with solid fescue stands, better-than-average water-holding capacity, winter water sources and electric-fencing capability. These are not requirements but will help maximize return on investment.

Plan to graze or clip these selected pastures by mid-August. Ideally, graze the pastures, then clip to a uniform height if the pastures were not mowed earlier this summer. The goal is to "reset" the pasture by removing stems and stalks. When considering mowing height prior to stockpiling, think about how stockpiling should occur.

Stockpiled cool-season grass growth occurs during the fall growing period, not the spring or summer. Some prefer to mow grazed pastures high, greater than 8 inches, to minimize the forage "wasted" by mowing. At this point in the season, cattle are not going to voluntarily graze these tall residues. They were not grazed the first time through the pastures, and with lush fall growth as an option the next time through these pastures, the residues will be rejected again. Removing residues minimizes leaf shading and removes long stems causing late-season eye irritation.

Once pastures are reset, plan to apply 40 to 60 units of nitrogen as close to a rain shower as possible. With ammonium nitrate or stabilized urea, application windows are 7 to 14 days. Visit with your regional agronomist or co-op manager when evaluating fertilization products and rates. As a rule of thumb, within the 40 to 60 units of nitrogen (N) per acre range, each unit of N results in 20 lb. additional stockpiled forage produced.

A common response to the stockpiling concept is, "If I had that many acres to set aside for 60 to 70 days, I would have more cows." There are several ways to address this challenge.

Consider trying stockpiling on limited acres by using stockpiled forage as a protein and energy supplement rather than forage replacement. Feeding cows hay and allowing them to strip-graze stockpiled supplement minimizes the need for concentrate feeding and storage equipment while reducing stockpile acres. Cows can recycle forage protein for several days, so strip-grazing the stockpiled forage using two- to three-day allocations saves labor by reducing temporary fence movement.

For those who want to reduce winter hay by feeding stockpiled forage, consider hay feeding in August, September and October while pastures are growing. During late summer and early fall, hay-feeding conditions are typically better with drier soil conditions. Hay storage waste should decline due to reduced weather exposure.

For spring-calving herds, using stockpiled forage during the winter can increase the cow's nutritional plane prior to calving compared to most hay-feeding systems. Getting gestating cows to a body condition score 5 or 6 precalving will improve reproductive success the following year. Feeding hay during late summer/early fall may also improve late-summer shade management by allowing extended shaded pasture use once pastures are grazed out.

For those producers with summer annual crops such as sorghum-Sudan grass or pearl millet or on acres where corn silage is harvested, autumn forage options include winter annuals or conversion to perennial pasture. When considering winter annuals, oats are more suited to fall grazing, while cereal rye, wheat, annual ryegrass and turnips are better spring options. Wheat gives producers the grain harvest flexibility, while cereal rye should produce sufficient forage to consider baling and wrapping early next spring.

For those inclined to convert these acres back to permanent pasture, consider replacement with novel-endophyte tall fescue. The negative effects of endophyte-infested tall fescue are apparent in pastures now as cattle are challenged with heat stress, rough hair, reduced growth and reproductive performance. Novel-endophyte tall fescue gives the benefits of tall fescue persistence without negative animal performance effects.

There are many autumn and winter forage options; the key to taking advantage of this flexibility is planning ahead.

Southern Great Plains

*by **David Lalman**, Oklahoma State University, david.lalman@okstate.edu*

Spring-calving herds

1. A self-limited, high-protein creep-feeding program (such as the Oklahoma Silver program) enhances weight gain without

causing calves to become excessively fleshy, because intake is limited to around 1 lb. of supplement per head per day. After about 30 days of creep consumption, a salt concentration of around 10% may be required to achieve this low level of intake. This program will only work with adequate forage availability.

2. Prepare for weaning by purchasing health program supplies, ensuring that working and weaning facilities are in good condition, and planning a nutrition program for weaned calves. This should include planning and managing for availability of high-quality pasture for the freshly weaned calves, assuming adequate precipitation.
3. If the cow herd can be gathered once before weaning, an effective strategy is to vaccinate calves two to six weeks prior to weaning and again at weaning. In fact, many value-added health programs recommend this protocol to maximize immune response in weaned calves.

Fall-calving herds

1. Yearling replacement heifers grazing native pastures may benefit from a small package (around 1 lb. per day) of high-protein supplement in order to ensure adequate growth and development prior to breeding in November.
2. Calves that were first vaccinated at weaning require booster vaccinations within two to four weeks.
3. Calving season begins in mid- to late August for most fall-calving herds. Purchase calving supplies and prepare ID tags. The incidence of dystocia due to heavy birth weight is lower in fall-calving systems. However, producers should still be prepared to deal with occasional dystocia cases associated with abnormal presentations.

General recommendations

1. Monitor herd health for the possibility of a pinkeye (infectious bovine keratoconjunctivitis) outbreak. Once started, the spread of this disease can be very difficult to control, so it is better to treat animals early and address preventive management steps. One of the primary culprits in spreading the disease is thought to be horn flies and face flies. Another agitant thought to facilitate this disease is intense ultraviolet radiation. Therefore, shade is important for all animals, and eye patches can be used on infected animals to minimize both sunlight and exposure to flies. When treating cattle for pinkeye, wear gloves and protective clothing and discard or disinfect clothing and equipment used

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Western Region

*by **Randy Perry,** California State University, Fresno, randyp@csufresno.edu*

Fall-calving herds

The main focus is to prepare for the calving season.

Genetic management

Sire selection. The start of the breeding period is several months away; however, now is the time to start developing a list of potential AI sires. For most successful purebred producers, sire evaluation is a continual process that never ends. In my opinion, it is the most important management decision that is made each year in a purebred or seedstock operation of any species.

Reproductive management

Vaccinations. If any precalving vaccinations, such as a scour vaccine, are going to be administered, they should be given far enough in advance of the calving season to avoid handling cows that are extremely close to parturition.

Calving supplies and equipment. Be sure that equipment is in working order and supplies are on hand to assist females once calving starts. In addition, if injections such as selenium are going to be administered at birth, be sure that an adequate supply of those products is on hand.

Nutritional management

Mineral supplementation. Be sure cows 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 year and available forage resources. Mineral boluses or injectable products can be used in addition to loose or block mineral products.

Body condition. The target level of body condition at calving is a minimum BCS of 5.0 for mature cows and 6.0 for 2-year-old heifers on a scale of 1 to 9 (see *www.cowbcs.info*).

Protein and energy supplementation. Both protein and energy requirements need to be met to achieve the desired level of body condition as described previously. If cows are grazing dry native forage, typically protein is more limiting as compared to energy.

Be sure supplements are priced on a cost per unit of protein or energy, depending on which nutrient is most limiting in your situation. In situations where forage quality is limited but there is plenty of forage or pasture available, protein will be the more limiting nutrient. In situations where forage quantity is lacking, such as drought or short feed conditions, then energy typically will be the more limiting nutrient.

Heifer development. The developmental period from weaning until breeding time is critical in terms of influencing the future productivity of females. Females should be developed to reach approximately 65% of their projected mature weight at the start of the breeding period and 85% of their projected mature weight at calving.

Health management

Treatment protocol. Have treatment protocols and products on hand for both scours and pneumonia in suckling calves. It is well-advised to have first- and second-treatment options for both conditions.

Spring-calving herds

The main focus is that cows and calves are on cruise control.

Reproductive management

Natural-service bulls. Bulls should be turned out and hopefully are doing their job. Watch for return heats from natural-service dates, and if a high percentage of females are coming back into heat, replace sires if that is an option.

Nutritional management

Mineral supplementation. It is important that minerals are supplemented on a year-round basis. Supplements should be formulated to meet deficiencies specific to your region or area.

Protein and energy supplementation. Most spring-calving cows in the West graze irrigated pastures. Typically, cows grazing irrigated pastures are receiving adequate levels of both protein and energy. Therefore, supplementation is not needed.

Health management

Pinkeye prevention. Midsummer is the time of year when problems with pinkeye can become quite prevalent and, thus, treatments can become time-consuming. The incidence of pinkeye can be reduced by clipping tall, mature grasses; controlling flies with dust bags, pour-ons and/or fly tags; and treating problems quickly and aggressively. Recommendations for treatment were included in last month's column.

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before moving on to treat or handle another animal.

2. At the time of this writing, pasture conditions are improved across much of the Southern Great Plains due to early summer rainfall. With abundant moisture, invasive plant species are thriving. While many woody plant (brush) species should ideally be sprayed earlier in the summer, some aggressive invasive species can be controlled with herbicide through the month of August. Sericea lespedeza is a good example, as it begins to flower and produce seed in late August and September.
3. Hay supplies this coming winter will be abundant, although likely low in quality due to delayed harvest and rain damage. Much of the cool-season annual (wheat) hay crop was not harvested at all due to rain delays or harvested after substantial rain damage. Be sure to have warm-season annual forage tested for the potential of high nitrate content. Of course, this risk is much greater if drier conditions return. If you will need to purchase hay to winter your cattle this year, now is the time to begin identifying a source.
4. Consider managing a portion of Bermuda grass and fescue pasture for late-summer fertilization and fall grazing. More information is available at *www.beefextension.com.*
5. Early to mid-August is about the latest a person can spray sericea lespedeza and expect to achieve reasonable reductions in the plant population the following year.

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