Angus Advisor

▶ **JULY** 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

Midwest Region

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

Fly control and heat stress

Producers gathering cattle for early pregnancy diagnosis or fetal sexing have the opportunity to implement fly-control methods while cattle are gathered. Fly control is important due to potential production losses and disease transfer.

Horn flies are small blood-feeding flies found upside down on cattle backs in the morning, moving to the belly in the afternoon. Once horn-fly populations exceed 200 flies per animal they are reducing performance, decreasing gain by 10 lb.-20 lb. during the grazing season.

Stable flies are another blood-feeding cattle pest, generally feeding on legs, and causing cattle to bunch up or stand in the water. Three to four stable flies per leg are the economic threshold. Stable flies complete their life cycle in decaying organic matter such as found around hay-feeding areas.

Face flies are not blood-feeding pests but congregate around the eyes and nose where they feed on tears and other secretions. Face-fly populations are considered low, moderate and high at 5, 12-13 or greater than 20 per animal, respectively. Moderate to heavy populations can reduce grazing activity while causing eye irritation.

Fly control can be achieved using a variety of methods, such as farm sanitation, pour-on dewormers, sprays, fly tags, dust bags or insect growth regulators in mineral and feed. Consider using multiple methods to increase control success while preventing resistance development.

Disease transfer is the most common reason fly control is implemented. Producers attempt to reduce face-fly-induced pinkeye by implementing fly control. Remember, pinkeye is a complex disease caused by a number of factors — all related to eye irritation. Controlling face flies removes one of many potential sources of eye irritation. Anaplasmosis can also be transmitted by blood-feeding flies, while foot rot may be caused by flies forcing animals to congregate in ponds and streams to avoid fly bites.

Flies increase maintenance requirements due to blood loss while reducing energy intake and grazing activity; the result is reduced animal performance. Flies also contribute to heat stress, causing cattle to bunch up and reducing animal cooling.

Heat stress

High environmental temperatures and the possibility of heat stress cannot be controlled; however, producers can manage heat gained from sun exposure and metabolic heat production in pasture settings. Providing natural or man-made shade will reduce heat gained by minimizing sun exposure.

Shade can be detrimental if cattle do not have adequate space for air movement, similar to bunching due to flies. Shade requirements are not well-documented; however, recommendations for stocker cattle range from 15 sq. ft. to 30 sq. ft. per head, while mature cow requirements range from 30 sq. ft. to 40 sq. ft. of shade per head.

To address reduced feed intake and increased energy requirements due to heat and parasite stress, pasture managers should maintain vegetative pastures. Grazing vegetative grass-legume pastures during summer stress periods offers increased energy density and minimizes metabolic heat production from digestion of mature forages.

Preventing cattle from accumulating heat is the first step in preventing stress. As cattle accumulate heat, more energy is required for removal. When nighttime temperatures do not drop below 70° or wind movement is minimal during a period of two to three days, heat stress can become severe as accumulation may exceed the animal's ability to remove heat.

To remove or dissipate heat, cattle sweat and pant. Sweating and panting are not as effective when relative humidity is high due to reduced evaporation. As a result, periods of high humidity and low wind tend to increase heat stress more than high temperature periods with low humidity and a brisk wind. Take advantage of shaded pastures; however, do not neglect the benefits of wind. Avoid pastures where vegetation blocks the wind without providing shade.

Due to increased water loss from panting and sweating, water intake will increase 50% to 100%. Cattle may drink 2 gallons (gal.) of water per 100 lb. of body weight. Water intake is critical for all cattle classes, but

lactating cows are especially sensitive because milk is 85% water.

Summer can be a time focus shifts from cow-herd management to hay harvest and row-crop production. Taking time to develop a fly-control program and a shade-based pasture management system can pay dividends by minimizing production losses.

Southern Great Plains

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

Spring-calving herds

Breeding bulls should be removed from the cow herd after 60-90 days.

If you are in a region where May and June precipitation was abundant, you may need to consult your veterinarian regarding the potential value of deworming nursing calves during mid- to late summer. Response to the anthelmintic generally increases in wet years, although response will vary substantially depending on other factors, such as grazing intensity and previous parasite management.

Fall-calving herds

Wean fall-born calves before the middle of July to allow cows time to regain body condition before calving again.

At weaning, vaccinate calves according to your veterinarian's recommendations, deworm calves, preg-check cows and heifers, weigh and estimate condition scores of cows, and weigh calves. Transfer records for your whole herd to the American Angus Association.

A small package of high-protein supplement, such as recommended in the Oklahoma Gold program, can facilitate around a 2-lb. ADG on weaned heifers and bull calves grazing abundant native pastures during July, August and September. A strategic deworming program and the inclusion of a feed additive such as Bovatec,® Rumensin® or chlortetracycline are important features in this program.

General comments and recommendations

As of this writing, soil moisture conditions have improved throughout the region, with rain delaying or prohibiting harvest of cool-season annual forage for hay. Livestock water sources in the East are overflowing, while they are slowly recovering in the West.

Harvest of warm-season perennial forage species for hay may be delayed once again this year. As usual, be prepared to test harvested forage, whether purchased or raised, so that you can determine the true value and appropriate application in a winter

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feeding program. A list of forage-testing laboratories certified through the National Forage Testing Association is available at *www.foragetesting.org*.

Remove intensive early stocking cattle from native grass pastures by July 10.

Continue fly- and tick-control programs for all cattle. The incidence of pinkeye is particularly high during late summer. Fly control is one key management factor in minimizing the spread of this disease.

Harvest Sudan grass and Sudan hybrids for hay in the boot stage, which generally corresponds to 3 ft. to 4 ft. in height. A routine nitrate test on forage before harvesting may be advisable, particularly if soil moisture has been scarce prior to harvest.

Treat cattle for grubs after heel-fly activity ceases and before larvae reach the back, generally between July 1 and Oct. 1. Check the date with your veterinarian.

Western Region

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

General management

Pasture irrigation and thistle control. If irrigated pastures are part of your forage resources, timely irrigation during hot summer months is critical in terms of affecting forage production. Mid-summer is also an excellent time to try to control thistle or other invasive weeds in pastures. This year in California, availability of irrigation water is a major issue in many areas.

Pinkeye prevention. Mid-summer is the time of the 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; and controlling flies with dust bags, pour-ons and/or fly tags. In addition, availability of shade helps to reduce the incidence of pinkeye. It is important to treat problems quickly and aggressively, thus reducing the spread of the disease by flies.

Antibiotics such as the long-acting oxytetracyclines are very effective in treating pinkeye. A more inexpensive treatment option, but one that is more difficult to administer, is to treat the infected eye with an injection of 2 cc under the membrane that covers the upper portion of the eyeball with a mixture of 90% penicillin and 10% dexamethasone. Most people prefer to apply patches to infected eyes, and those can be made very easily from old, worn-out jeans. Leave the bottom portion of the patch unglued so the eye can drain.

Fall-calving herds

Cows are on cruise control.

Reproductive management

Vaccinations. If any precalving vaccinations, such as a scour vaccine, are going to be used, now is the time to decide on the specific product and get products on hand.

Nutritional management

Mineral supplementation. Be sure that cows are receiving adequate levels of calcium, phosphorus and trace minerals that are deficient in your area. The period from calving through the end of the breeding period is the best time to take advantage of chelated 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 more information online at *www.cowbcs.info).*

Protein and energy supplementation. Mid-summer is typically a time of the year when fall-calving cows will maintain themselves adequately with no need for either energy or protein supplementation as long as dry forage is available. The availability of dry forage is a major problem in many areas of southern California this summer because of the drought conditions in this part of the state.

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.

Spring-calving herds

Focus on breeding season and suckling-calf health.

Reproductive management

Breeding season. Depending on desired calving dates, the AI breeding period should be concluded. Monitor return heats and cleanup bull performance for any problems that may arise.

Nutritional management

Mineral supplementation. Be sure that cows are receiving adequate levels of calcium, phosphorus and trace minerals that are deficient in your area. Consider chelated mineral products, especially prior to calving and through the end of the breeding season.

Energy balance. Energy balance has a major impact on fertility, and thus it is critical that cows are in a state of positive energy balance or gaining weight during the breeding season.

Health management

Treatment protocols. Treatment protocols and products should be on hand for scours and pneumonia in suckling calves.

Mid-South Atlantic Region

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

At this point in the summer, we annually brace ourselves for the heat, and many times, the dryness of our July and August. The seasonal decline in pasture and cattle performance during this period is usually called "summer slump." Infested Kentucky 31 tall fescue gets most of the blame and is certainly a major contributor, but there are other factors in addition to fescue toxicity that come into play and contribute to this seasonal slump.

If adequate forage is available, but quality is suspect, consider the following management suggestions:

- The age-old suggestion for diluting infested tall fescue still works. The dilution can be other grasses, legumes or even supplemental feed; anything that takes the place of infested tall fescue.
- Manage pastures through clipping or grazing management to reduce seedheads and stems, which contain higher toxin levels. These management practices will produce a more open forage canopy that will prevent shading of favorable forages such as clovers and warm-season grasses.
- Creep supplementation of calves. Beyond supplementing low-quality pasture, creep feed can take advantage of this year's combination of affordable feed prices and a strong calf market, making this option more attractive than in most years. Keep in mind that if feed intake gets higher than desired, 2%-5% white salt can be added to reduce intake.
- Placement of mineral feeders can assist in more uniform pasture utilization. Place feeders well away from water sources and locate them in areas where cattle spend less time grazing.

Spring-calving herds (January-March)

General

- Focus on breeding season, forage management and calf health.
- Manage first-calf heifers separately; give them the best forage and supplement.

Nutrition and forages

- Switch from high-magnesium minerals to high-selenium mineral as grass matures.
- Manage growth of warm-season grass pastures by rotational grazing.
- Implement rotational grazing management system that will provide a beneficial rest period for pastures. July can be a challenging forage-management month. Depending on moisture, cattlemen are either trying to extend the utilization of mature early forage growth, or, if moisture is abundant, manage the growth of warm-season forages.
- Store your high-quality hay in the dry.
- Collect and submit forage samples for nutrient analysis.

Herd health

- Implement parasite- and fly-control program for the herd.
- Administer mid-summer deworming and implant.
- Consult with your veterinarian for a pinkeye control and treatment program.
- Plan vaccination and preconditioning protocol for calf crop.
- Castrate commercial calves (if not done at birth), consider castrating bottom end of male calves in seedstock herds.

Reproduction

- Remove bulls from replacement heifers after 45-day breeding season.
- Make plans to pregnancy-check heifers as soon as possible after bull removal. This will allow options in marketing open heifers.
- Monitor bulls closely during the breeding season to confirm breeding performance and soundness, and monitor cows for repeat estrus. Avoid overworking young bulls (a rule of thumb — yearling bulls should be exposed to number of cows equal to their age in months).
- Remove bulls after 60 days for a controlled calving season.

Fall-calving herds (September-November)

General

- Wean calves to allow ample opportunity for cows to replenish BCS prior to calving.
- Finalize marketing plans for calf crop. Time weaning, vaccination program and weaning management in concert with marketing plans. Calculate breakevens on various marketing options and consider risk-management strategies.
- Market open cows. Cull-cow prices typically peak mid-spring through mid-summer, and prices are generally stronger for cows in good body condition vs. thin cows (evaluate forage availability and potential feed and management costs to increase BCS of cull cows, if warranted).

Nutrition and forages

- Switch to high-selenium trace-mineral salt.
- Score bred females for body condition. Plan nutrition and grazing program based on BCS. This is the most efficient period to put weight and condition on thin cows.
- Reserve high-quality hay and a pasture area for calves postweaning.
- Manage growth of warm-season grass pastures by rotational grazing.
- Implement rotational grazing management system that will provide a beneficial rest period for pastures. July can be a challenging month for managing forage.

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- 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.
- Implement parasite- and fly-control program for the herd.
- Consult with your veterinarian for a pinkeye control and treatment program.
- Implement vaccination protocol for the calf crop. Design vaccination and weaning program around marketing goals and objectives. Vaccinate, wean and certify calves to be marketed in late summer.
- Reimplant commercial calves.

Genetics
- Identify replacement heifers. Utilize available tools, including genetics, dam performance, individual performance and phenotype. Restrict pool of replacement heifers to those born in a defined calving season.
- Finalize plans for postweaning development and marketing of bulls in seedstock herds.

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