MANAGEMENT

Angus Advisor

▶ **JUNE** 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

Southern Great Plains

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

Spring-calving herds

- Follow the vaccine program outlined for branding time.
- Consult your veterinarian regarding the need to deworm young cows and calves in June. This investment will depend a great deal on the location of your operation, forage species, stocking density, previous internal parasite management and other factors. More information is available now regarding parasite resistance to specific products, and your veterinarian will be aware of products and programs that should be appropriate in your area.
- June mid-day temperatures can suppress aggressive estrous activity. Therefore, visual heat detection should be done in early-morning and late-evening hours.
- Turn bulls out with cows after the AI program is completed. The bull-to-cow ratio will vary depending on the number of cows or heifers serviced to AI and the age of the bull. A conservative rule of thumb is to expose bulls to about 10 cows per year of age, and up to 30 open cows.
- For breeders who choose to creep-feed calves grazing native pastures, consider using a limit-fed, high-protein creep beginning around the end of June. Locally, we refer to this approach as the Oklahoma Silver program, where calves consume around 1 lb. per day of supplement. Weight gain is improved substantially, and calves do not become fleshy compared to free-choice, lower-protein creep-feeding programs. The conversion of feed to additional weight gain is drastically improved compared to a traditional creep-feeding program.

Fall-calving herds

- Depending on forage supply, producers may need to consider weaning fall-born calves earlier this year. A dam's milk production and calf performance decline dramatically in late June and July due to declining forage quality and summer heat. However, a dry cow's nutrient requirements are substantially lower than a growing calf's requirements, allowing them to gain weight and body condition during the summer months.
- At weaning, vaccinate calves according to your veterinarian's recommendations, deworm calves, weigh and condition score cows, and weigh calves. Transfer records for your whole herd to the American Angus Association.
- A high-protein supplementation program, such as the Oklahoma Gold program, can facilitate around a 2-lb. ADG in weaned calves grazing native pastures.

General recommendations

- Even though some areas of this region have had adequate rainfall this spring, range scientists and agronomists continue to caution producers to reduce stocking rates and monitor forage conditions closely. Forage plants may require two or three years to recover completely from the severe stress of the last two years of extreme drought.
- In Oklahoma, more foot rot cases are observed in June than any other month. Develop a plan for treatment with your veterinarian, and acquire the necessary supplies.
- Plan to harvest native grass hay during early July to achieve near-optimum balance between quality and quantity of hay. Harvest Bermuda grass hay, or graze at about 30-day intervals when precipitation is abundant. All else being equal (maturity, precipitation, soil fertility, etc.), Bermuda grass harvested for hay in June has higher digestibility than Bermuda grass harvested in the hot summer months of July and August.
- Begin grazing Sudan grass and Sudan hybrids when 18- to 24-in. high.
- Federal and state estimated tax payments are due June 15.

Western Region

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

Fall-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, and open and problem cows should be culled. Avoid holding over open cows even if they have been excellent producers, as typically the problem will recur.

Nutritional management

Body condition. Monitor body condition of cows. The target level of body condition at calving is 5.0 for mature cows and 5.5 to 6.0 for 2-year-old heifers (scale = 1 to 9).

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 impact foot and leg soundness.

Health management

Weaned calves. Weaned calves should be treated to control any internal or external parasites. Heifer calves should be Bang's 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.

Pregnant cows. If late-term abortions have been a problem in the past, consider booster vaccinations for leptospirosis at preg-check time.

Spring-calving herds

The main focus is breeding season and suckling calf health.

Reproductive management

Breeding season. Depending on desired calving dates, the AI breeding period should be close to being concluded. Monitor return heats for any patterns that may arise in terms of low conception rates with specific sires. Also consider using GnRH injections with repeat inseminations. In addition, be sure that cleanup bulls have been semen- and trich-tested and are ready for use in terms of vaccinations and health, body condition, and foot and leg soundness.

Nutritional management

Mineral supplementation. Be sure that 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. The period from calving until conception is the most critical in terms of influencing reproductive performance.

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. June is normally a month when cows will be grazing pastures that are of sufficient quality to maintain cows in positive energy balance without any need for supplementation.

Health management

Treatment protocol. Treatment protocols

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and products should be on hand for scours and pneumonia in suckling calves. It is well-advised to have first and second treatment options for both conditions. Early summer is typically the time of the year when we experience the most problems with pneumonia in young calves. Monitor calves closely and be quick and aggressive with treatment, as young calves will go downhill quickly.

General management

Castrate bottom-end bull calves. Producers should consider castrating the bottom end of their bull calves at 2 to 3 months of age when they receive their first round of vaccinations. Some producers are reluctant to do this because of the impact that it has on contemporary groups and performance records. However, there is typically more profit in selling a weaned steer calf vs. a cull yearling bull that has accumulated a significant amount of development costs.

Pinkeye prevention. 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. Our preferred treatment is an injection of approximately 2 cc (mixture of 90% penicillin and 10% dexamethasone) under the membrane that covers the upper portion of the eye and to then cover the eye with an eye patch.

Midwest Region

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

Managing Heat Stress

Cattle accumulate heat in three ways: high temperature, sun exposure and metabolic heat production. In pasture settings two of these factors can be addressed to minimize the effects of heat stress. Environmental temperature cannot be reduced in a natural setting; however, providing shade will reduce heat stress 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 between 15 ft.-30 ft. per head, while mature cow requirements range from 30 ft.-40 ft. of shade per head.

To address reduced feed intake and increased energy requirements due to heat, pasture managers should maintain vegetative pastures, preferably with legumes. Grazing vegetative grass-legume pastures during summer stress periods offers increased energy density and minimizes metabolic heat production from digestion of mature forage. Stocker operators have the option of providing supplemental feed during periods of heat stress to increase diet energy density. Plan to feed any pasture supplements as late in the day as possible to minimize metabolic heat production during daylight hours.

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° F or wind movement is minimal over a period of two to three days, heat stress can become severe as accumulation may exceed the animals' 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%-100%. Cattle may drink 2 gal. of water per 100 lb. of body weight. Water intake is critical for all cattle classes, but lactating cows are especially sensitive since milk is 85% water.

For those producers whose calving season requires a June and July breeding season, achieving satisfactory reproductive performance can be challenging due to cows' longer heat-stress-induced postpartum recovery period. Additionally, heat-stressed bulls are less active, and research suggests they may require eight weeks to recover to similar sperm motility as unstressed bulls.

Balancing summer-breeding-season heat stress and winter-calving-season snow and mud requires a careful study of the local environment. In the Midwest, where most cows are grazing endophyte-infested tall fescue, body temperatures are already elevated due to fescue toxicosis. Fescue toxicosis and heat stress can be minimized by keeping forages vegetative during the grazing season. With several producers considering mob grazing, where forages are more mature during grazing, the combination of heat stress and fescue toxicosis may combine to reduce reproductive rates.

Plan now to address heat stress. From June until September, temperatures will continue to increase, and not having a management plan to address the challenges can lead to reduced performance, lower pregnancy rates and increased mortality.

Mid-South Atlantic Region

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

Although the official start of summer isn't until the 21st of the month, summer conditions have already made an appearance.

Cattle comfort should be monitored, ensuring adequate shade and availability of clean water. Hot weather also signals the onset of fly season. Delay application of tags until you see a threshold of about 100 flies per side. The delay of tag application in early summer extends protection into the warm days of early fall. Cool-season grasses are now mature; if weather conditions are dry, delay pasture clipping until there is adequate soil moisture for forage regrowth. Pasture rotation during the summer months will guarantee a rest period for forages yielding a more productive, diverse pasture.

Spring-calving herds (January-March)

General

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

Nutrition and forages

- Continue feeding high-magnesium minerals to prevent grass tetany; may be able to switch to high-selenium mineral as grass matures.
- Complete harvest of first cutting of hay early in the month.
- Start grazing warm-season grasses.
- Implement rotational-grazing management system, which will provide a rest period for pastures.
- Make plans to 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 herd.
- Administer mid-summer deworming and implant calves late in the month or early next month.
- 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

- Finish AI; turn out cleanup bulls.
- Remove bulls from replacement heifers after 45-day breeding season
- Make plans to preg-check heifers as soon as possible after bull removal. This will allow options in marketing open heifers.
- Use 48-hour calf removal for thin cows and first-calf heifers at beginning of breeding season.
- Monitor bulls closely during the breeding season. Observe frequently 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).

Fall-calving herds (September-November)

General

- Plan a marketing strategy for 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.
- Finalize marketing plans for calf crop. Time weaning, vaccination program and weaning management to meet operational goals. Calculate breakevens on various marketing options and consider risk-management strategies.
- Reimplant commercial calves.

Nutrition and forages

- Switch to high-selenium trace-mineral salt.
- Body condition score cows. Plan nutrition and grazing program based on BCS. This is the most efficient period to put weight and condition on thin cows.
- As calves are weaned, move cows to poorer-quality pastures.
- Use palatable feeds during the weaning period to bunk-train calves and minimize weight loss.
- Reserve high-quality hay and a pasture area for calves postweaning.
- Start grazing warm-season grasses.

Herd health

- Administer mid-summer deworming on replacement heifers and pregnant heifers
- Implement parasite- and fly-control program for herd.
- Consult with veterinarian on vaccination protocol for calf crop. Design vaccination and weaning program around marketing goals and objectives. Vaccinate, wean and certify calves to be marketed in late summer.

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.
- Finalize plans for postweaning development and marketing of bulls in seedstock herds.