

Guide to abbreviations and acronyms

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

\$Value	s dollar value indexes
ADG	average daily gain
Al	artificial insemination
AIMS	Angus Information
	Management Software
BCS	body condition score
BLV	bovine leukemia virus
BMP	best management practices
	<u> </u>
BQA	beef quality assurance
BRD	bovine respiratory disease
BRSV	bovine respiratory synctial virus
brucelle	osis Bang's disease
BSE bo	ovine 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
ID IM	identification
IM	intramuscular
IM in.	intramuscular inch
IM	intramuscular
IM in.	intramuscular inch
IM in. lb.	intramuscular inch pound
IM in. lb. LCT lepto	intramuscular inch pound lower critical temperature leptospirosis
IM in. lb. LCT lepto Mg	intramuscular inch pound lower critical temperature leptospirosis magnesium
IM in. lb. LCT lepto Mg MiG	intramuscular inch pound lower critical temperature leptospirosis magnesium management-intensive grazing
IM in. lb. LCT lepto Mg MiG MLV	intramuscular inch pound lower critical temperature leptospirosis magnesium management-intensive grazing modified-live virus
IM in. lb. LCT lepto Mg MiG MLV N	intramuscular inch pound lower critical temperature leptospirosis magnesium management-intensive grazing modified-live virus nitrogen
IM in. lb. LCT lepto Mg MiG MLV	intramuscular inch pound lower critical temperature leptospirosis magnesium management-intensive grazing modified-live virus nitrogen phosphorus
IM in. lb. LCT lepto Mg MiG MLV N	intramuscular inch pound lower critical temperature leptospirosis magnesium management-intensive grazing modified-live virus nitrogen
IM in. lb. LCT lepto Mg MiG MLV N P PI	intramuscular inch pound lower critical temperature leptospirosis magnesium management-intensive grazing modified-live virus nitrogen phosphorus persistent infection
IM in. lb. LCT lepto Mg MiG MLV N P PI Pl3	intramuscular inch pound lower critical temperature leptospirosis magnesium management-intensive grazing modified-live virus nitrogen phosphorus persistent infection parainfluenza-3 virus
IM in. lb. LCT lepto Mg MiG MLV N P PI Pl3 preg-ch	intramuscular inch pound lower critical temperature leptospirosis magnesium management-intensive grazing modified-live virus nitrogen phosphorus persistent infection parainfluenza-3 virus
IM in. lb. LCT lepto Mg MiG MLV N P PI Pl3 preg-ch Se	intramuscular inch pound lower critical temperature leptospirosis magnesium management-intensive grazing modified-live virus nitrogen phosphorus persistent infection parainfluenza-3 virus seck pregnancy-check
IM in. lb. LCT lepto Mg MiG MLV N P PI Pl3 preg-ch Se sq. ft.	intramuscular inch pound lower critical temperature leptospirosis magnesium management-intensive grazing modified-live virus nitrogen phosphorus persistent infection parainfluenza-3 virus seck pregnancy-check selenium square feet
IM in. lb. LCT lepto Mg MiG MLV N P PI Pl3 preg-ch Se sq. ft.	intramuscular inch pound lower critical temperature leptospirosis magnesium management-intensive grazing modified-live virus nitrogen phosphorus persistent infection parainfluenza-3 virus seck pregnancy-check
IM in. lb. LCT lepto Mg MiG MLV N P PI Pl3 preg-ch Se sq. ft.	intramuscular inch pound lower critical temperature leptospirosis magnesium management-intensive grazing modified-live virus nitrogen phosphorus persistent infection parainfluenza-3 virus seck pregnancy-check selenium square feet
IM in. lb. LCT lepto Mg MiG MLV N P PI Pl3 preg-ch Se sq. ft. SPA Si	intramuscular inch pound lower critical temperature leptospirosis magnesium management-intensive grazing modified-live virus nitrogen phosphorus persistent infection parainfluenza-3 virus leck pregnancy-check selenium square feet tandardized Performance Analysis
IM in. lb. LCT lepto Mg MiG MLV N P Pl Pl3 preg-ch Se sq. ft. SPA St TB TDN	intramuscular inch pound lower critical temperature leptospirosis magnesium management-intensive grazing modified-live virus nitrogen phosphorus persistent infection parainfluenza-3 virus eck pregnancy-check selenium square feet tandardized Performance Analysis bovine tuberculosis total digestible nutrients
IM in. lb. LCT lepto Mg MiG MLV N P PI Pl3 preg-ch Se sq. ft. SPA St TB TDN THI	intramuscular inch pound lower critical temperature leptospirosis magnesium management-intensive grazing modified-live virus nitrogen phosphorus persistent infection parainfluenza-3 virus seck pregnancy-check selenium square feet tandardized Performance Analysis bovine tuberculosis total digestible nutrients temperature-humidity index
IM in. lb. LCT lepto Mg MiG MLV N P Pl Pl3 preg-ch Se sq. ft. SPA St TB TDN	intramuscular inch pound lower critical temperature leptospirosis magnesium management-intensive grazing modified-live virus nitrogen phosphorus persistent infection parainfluenza-3 virus eck pregnancy-check selenium square feet tandardized Performance Analysis bovine tuberculosis total digestible nutrients

Southern Great Plains

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

Spring-calving herds

- ► Follow the vaccine program outlined for May, if not done at that 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 earlymorning 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.
- Pror 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

- ► Wean fall-born calves in June or early July. A dam's milk production and calf performance decline dramatically during the month of July due to declining forage quality and summer heat.
- ► 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

- ► Continue fly and tick control programs for all cattle.
- ▶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 pregchecked, 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 affect 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 pregcheck 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 and products should be on hand for scours and pneumonia in suckling calves. You are 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 managementCastrate 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. We prefer to treat eyes 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. In addition, we apply an eye patch made of old jeans to any eye that receives treatment.

Midwest Region

by **Twig Marston**, University of Nebraska, tmarston2@unl.edu

June is a month to let Mother Nature take her course. Native grasses are usually at peak production; therefore, little supplementation is needed, with the exception of some minerals. Cool-season grasses are reaching maturity, making them less palatable and lower in nutrient quality.

Cow-herd nutrition

- ▶ Provide plenty of clean, fresh water.
- ▶ Provide free-choice minerals to correct any mineral deficiencies or imbalances.
- ► Monitor grazing conditions and rotate pastures if possible and practical.
- ▶ Consider creep-feeding if it's cost-effective.

Herd health

- ► Monitor and treat pinkeye cases. Provide fly control. Consider all options; price and efficiency will dictate the best options to use.
- ► Monitor for and treat foot rot.
- To reduce heat stress, avoid handling and transporting cattle during the hottest times of the day.

Forage and pasture management

- ► Check and maintain summer water supplies.
- ► Place mineral feeders strategically to enhance grazing distribution.
- ► Effective herbicide application will improve range and pasture species profiles.
- ► Check water gaps after possible washouts.
- ► Harvest hay in a timely manner; think quality and quantity.

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Reproductive management

- ▶If using AI, manage for maximum pregnancy rates. A common practice is to use estrous synchronization, inseminate once or twice with AI, and then turn out bulls for the balance of a 65-day breeding season. A 42-day AI season with estrous synchronization at the front end gives most females three chances to conceive by AI.
- ► Follow one of the recommended Beef Reproduction Task Force estrous synchronization protocols (listings available from your Extension service, genetic companies and semen suppliers).
- ► Watch bulls for libido, mounting and breeding function.
- ▶ Record breeding dates to determine calving
- ▶ By imposing reproductive pressure (45-day breeding season) on yearling heifers, no late-calving 2-year-olds will result. This will increase lifetime productivity and profits.

Genetic management

► Monitor herd performance. Then identify candidates to cull because of poor performance.

General management

► Check equipment (sprayers, dust bags, oilers, haying equipment, etc.), and repair or replace as needed. Have spare parts on hand because downtime can make a big difference in hay quality.

Southeastern Region

by **Lawton Stewart**, University of Georgia, lawtons@uga.edu

Decisions, decisions ... Will it pay to feed our weaned calves?

As we move into the warmer months, many of us are weaning calves, or getting ready to wean in the fall. Also, we're grinning as we see cattle prices at record highs.

With the high prices, some producers are likely considering supplementing calves prior to or after weaning to add a few extra pounds before they are marketed. However, cattle prices aren't the only thing going up that we need to take into consideration. Basically, all of our input costs are going through the roof. Feed and fuel prices are high, which, in turn, means our costs to produce forages are going up, as well. Before we invest in a feed program, we need to make sure we can get our money back from the investment. Three things to consider when developing a feed program for calves are:

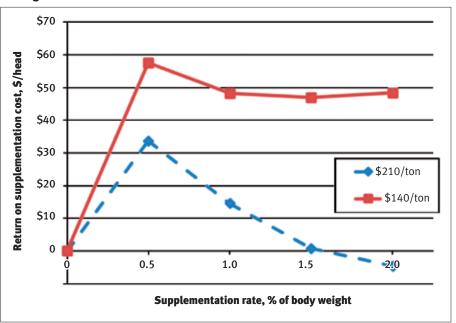
- **1. Cost and quality of forages.** Forages are our cheapest source of nutrients *if* we manage them correctly. Also, the type of forage should be considered. A hybrid Bermuda grass pasture such as Tifton 85 or Russell has the potential to produce higher gains compared to Pensacola Bahia grass, but it takes more inputs (i.e., water and fertilizer) to make the high-quality forage.
- 2. Cost and quality of supplements. Similar to our forage costs, the cost of our supplements is becoming more important than ever. There once was a time when we could rely heavily on corn and soybean meal as a supplement, but both of these have become cost-prohibitive. Producers should regularly evaluate the cost of their supplements, whether commercial or commodity-based, to ensure they are remaining cost-effective.
- **3. Calf prices.** Although it can be beneficial to feed calves to add weight, we need to keep in mind the discounts as they get heavier. For example, for the week of April 20, 500-550-lb. and 551-600-lb. cattle brought an average price of \$170 and \$163 per cwt., respectively, in Georgia. That means that a heavier calf has more pounds of beef, but does not bring as much per pound. The length of the feeding period will also affect the final weight at which the cattle are sold.

To put all of this together, consider the return on supplement cost for calves on Bahia grass pastures (see Fig. 1). This represents the return for calves with a starting weight of 400 lb. and fed for 75 days at different supplementation amounts at a cost of \$200 per ton. From the first point above, we are utilizing relatively low-quality forage, so the first level of supplementation (0.5% of body weight) gives the highest return.

Next, consider the second point. This example utilizes a 50:50 mix of corn gluten and soybean hulls (18% CP and 80% TDN). Calves will continue to gain more with an increasing rate of supplementation, but usually are less efficient above a rate of 1% of body weight. If you look at Fig. 1, you can see the difference in returns on feed costs for the same supplement, but at different prices (\$210 and \$140). This price difference represents the difference in booking these commodities at seasonal lows vs. spot loads during high prices. You can see that at both prices there is a return; however, with higherpriced feeds, the return eventually becomes negative.

This example only represents a snapshot in time, and can change dramatically if variables such as time on feed, forage utilized, cost of feed and the value of the cattle change. Of these, a producer does not have as much

Fig. 1: Return on supplementation cost as rate of supplementation increases for 450-lb. calves being fed a 50:50 mix of corn gluten and soy hulls for 75 days while grazing Bahia grass



control over the price of the cattle. However, the take-home message should be if forages are managed properly and the feed program is designed efficiently, producers can use certain levels of supplementation to increase the profits for their calf crop. For additional information on supplementation strategies for cattle, please contact your local Extension office.