



Angus Advisor

► MAY 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 syncytial 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

- For most producers in the Southern Great Plains, May is “branding” time in spring-calving herds. Your veterinarian should be consulted regarding the appropriate animal health strategies to administer at this time. Typical protocols will include branding, fly tagging, castrating bulls not intended for breeding purposes, vaccinating with a seven-way clostridial bacterin, and occasionally with an IBR and PI₃ product. Be sure to replace missing animal ID tags in both calves and cows.
- Recent research published by Oklahoma State University (OSU) veterinary scientists indicates that, in properly immunized cow herds, a modified-live respiratory viral combination vaccine given at branding, followed by revaccination at weaning, is as effective a vaccination strategy as vaccine given preweaning (21-30 days) followed by revaccination at weaning. Previously, it was thought that maternal antibodies reduced the effectiveness of a respiratory viral vaccine given at branding time (30-90 days of age). This vaccination protocol is becoming a very popular strategy as animal handling and labor are minimized, because calves are traditionally handled at branding and weaning. Additional respiratory viral vaccine revaccination or booster vaccination will be dependent on future production channels — feedlot, replacement heifer, performance testing trials, etc.
- May is a good time to deworm cattle as part of a strategic deworming program because the animals have had ample time grazing spring forage to carry a significant parasite load.
- Breeding soundness exams should be performed on bulls before they are turned out with cows. The appropriate bull-to-cow ratio will depend on many factors, including age of the bull, size of the pasture and the number of cows or heifers serviced to AI. A conservative rule of thumb is to expose the same number of cows or heifers according to a young bull’s age in months. For example, a 14-month-old bull might be exposed to 14 females, while a 2-year-old bull might be exposed to 20-25 cows.

Fall-calving herds

- Purebred breeders in the Southern Great Plains wean fall-born calves between April and July. If the calves will be handled (constrained in a squeeze chute) in the spring and weaned during summer, take advantage of the May “calf working” event by administering a vaccination and possibly a deworming program recommended by your local veterinarian.
- Look for and record cows that should be culled due to calf performance, feet, leg, eye, udder and attitude problems. These records are often more practical to collect and record prior to the weaning date.
- At weaning, vaccinate calves according to your veterinarian’s recommendations, weigh and condition score cows, and weigh calves.
- While we are on the subject of weighing cattle, remember that being consistent in terms of weighing “conditions” is an important part of collecting quality data over time. Industry standard weighing conditions can be described as semi-fasted. This simply means that cattle are generally gathered in the early morning hours before they’ve had a chance to graze very much. Weights should then be recorded within the next few hours, if possible.
- Transfer whole-herd records to your national breed association for processing.

General recommendations

- As of this writing, drought looms again, with more than 90% of Oklahoma, Texas and New Mexico classified in the “abnormally dry” to “exceptional drought” categories, according to the National Drought Monitor website (<http://droughtmonitor.unl.edu/>). Rains in late winter and early spring drive the bulk of forage production in this region. Therefore, if precipitation in your area continues to be marginal by the time you read this in May, it is time (actually past time) to implement your drought-management plan.
- The goal is to protect the natural pasture or rangeland resource and maintain animal well-being, productivity and health. The biggest mistake many producers make in times of drought is to wait too long before intervening (reducing stocking rate, early weaning, drylot feeding, etc.).
- Implement a fly- and tick-control program for all cattle.
- Plant Sudan grass and Sudan hybrids for summer grazing or hay, fertilizing according to soil tests.
- Nitrogen fertilizer efficiency is improved when nitrogen applications are split into two or more applications approximately 30-45 days apart during the growing season. Late May or early June is a good time to plan the second application.

- ▶ In most cases, mineral supplements containing 4%-10% phosphorus are adequate during this time of year.
- ▶ In this region, foot rot is a common problem through late May, June and early July. Limited research indicates that the addition of chlortetracycline to mineral supplements can reduce this problem. Adequate zinc supplementation is also important because many soil types and forages in the Southern Great Plains do not contain adequate zinc.

Western Region

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

Fall-calving herds

The main focus is to prepare for weaning. Cows are on cruise control.

Pregnancy-check. Cows should be preg-checked at weaning time. Avoid holding over open cows even if they have been excellent producers, as typically the problem will reoccur.

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 of gain so that differences in terms of genetic potential for growth can be expressed. 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.

Weaned calves. Weaned calves should be treated to control internal and external parasites, and heifer calves should be Bang's-vaccinated. Both bulls and heifers should be PI-BVD-tested if that is part of your animal health management program. The first 30 days after weaning is the most critical period concerning problems with BRD in cattle. If calves are exposed to dusty lots, run a sprinkler or water wagon — it will more than pay for itself.

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

Spring-calving herds

The main focus is to prepare for the breeding season.

Sire selection. Sire selection is the most important management decision that is made each year in a purebred cattle

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operation. Be sure that you are using the best sires available that fit your genetic goals or objectives.

AI program. Semen should be on hand and a synchronization protocol should have been selected. In addition, all AI equipment and facilities should be ready for use. Don't overlook the importance of good heat detection and attention to details concerning semen handling. Breed yearling heifers from 2 weeks to 1 month prior to the mature cows; therefore, they have the extra time to recycle and rebreed as 2-year-old first-calf cows.

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, and the period from calving until conception is the most critical in terms of influencing reproductive performance.

Vaccinations. Cows and cleanup bulls should have been vaccinated at least 30 days prior to the start of the breeding period. This is also an excellent time to treat for internal and external parasites. We prefer to use a pour-on product at this time of the year as

it also knocks down fly populations. If not already done, calves should receive their first round of vaccinations for the respiratory disease complex and the clostridial diseases.

Pinkeye. To help control pinkeye, consider mowing tall pasture grasses, reducing fly populations with sprays, dust bags or fly tags, and treating problems quickly so they do not spread within groups. Access to shade will help reduce the incidence of pinkeye. We prefer to treat pinkeye with a mixture of 90% penicillin and 10% dexamethasone and an eye patch. We inject approximately 2 cc under the membranes on the upper portion of the eyeball.

Treatment protocol. Treatment protocols 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, and be sure that the protocols have been communicated to the appropriate personnel.

Midwest Region

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

Opportunities to add value

The formula for calf-crop value is simple:

calf-crop value equals pounds of calf sold times price per pound sold. "Value added" refers to management practices designed to increase calf weight or sale price, and a value-added calf (VAC) program combines and documents multiple health, nutrition and management practices into one system.

To truly add value to a calf, expenses incurred from labor, feed, pharmaceuticals or additional labor must be offset by increased market value in the form of greater weight or price. A value-added program will result in greater dollars paid to the producer over total costs. As fall-calving herds approach weaning, preconditioning VAC opportunities begin, while spring-calving herds can start a VAC program at branding or the start of the breeding season. Stocker operators can participate in VAC programs designed to minimize feedlot arrival health risk.

Historic "captured" VAC program value has varied from \$2 to \$7 per cwt. due to season, calf supply, cattle quality, practice verification and program recognition. VAC programs with stringent requirements and practice verification have returned \$2.75 per cwt. greater premiums compared to "seller claims."

Most VAC programs have specific vaccination and weaning management requirements. Work with your local veterinarian to develop a calf health program designed to minimize disease risk while incorporating multiple VAC marketing options. Working with your veterinarian now to enhance calf marketability can reduce labor and processing costs later.

Beyond vaccines, spring calf processing should include castration. Producers marketing bull calves at lighter weights can receive approximately \$5 per cwt. less than steers while discounts on heavier bulls may exceed \$7 per cwt. Castrate cull bull calves early to minimize stress while providing adequate time to heal prior to marketing.

Using growth-promoting implants following castration allows for comparable preweaning gain. Also consider implanting late-born cull heifer calves. Replacements should initially be selected from those born early in the calving season. Making an initial sort on potential replacement heifers at branding or prebreeding offers opportunity to implement management practices such as implanting to add value through improved performance.

Weaning calves 45-60 days is another VAC program requirement. During the weaning period, calves are introduced to supplemental feed and trained to eat from a bunk. Many producers initiate this practice using creep-feeding systems while calves nurse cows. Creep-feeding is most beneficial when milk

production is poor, and forage quantity or quality is limiting.

Fall-calving herds are more likely to benefit from creep-feeding in late winter or early spring due to nutritional and environmental conditions limiting milk production. Spring-calving herds should consider feed cost and forage availability before initiating a season-long creep-feeding program to add weight to calves. Consider

To truly add value to a calf, expenses incurred from labor, feed, pharmaceuticals or additional labor must be offset by increased market value in the form of greater weight or price.

creep-feeding late-born calves or lighter-weight calves from replacement heifers to narrow the weight spread of the calf crop and to improve uniformity. In mature cows, or during periods of abundant forage supply, consider creep-feeding as a weaning transition program to familiarize calves with feed and feeding systems using minimal labor rather than as an option to improve performance.

Fly control is another opportunity to add value. Begin planning now to address fly-related weight loss and pinkeye. Cows and calves alike can benefit from methods implemented to control or reduce fly populations below economic thresholds. Horn flies reduce performance due to blood loss, while face flies aggravate cattle by feeding around eyes and nose. While planning a VAC vaccine program visit with your veterinarian regarding fly control and pinkeye treatment methods.

Numerous management practices can add value to calves. The key to adding value is considering the cost in addition to the ability to recover these costs. Begin developing a marketing plan now in order to capture value.

Mid-South Atlantic Region

by **Scott Greiner**, sgreiner@vt.edu; and **Mark McCann**, mark.mccann@vt.edu, both of Virginia Tech

Although pastures turn green in April, May is really a forage month. Cool-season forages have peaked in terms of nutrient content and hay-making plans should focus on combining both quality and quantity. Hay quality will influence its value to you next winter. Aim to harvest the highest-

quality hay possible, even though weather and mechanical problems always delay our best intentions. Work at rotationally grazing pastures with an emphasis on three to four weeks between grazing periods. This will have beneficial effects on plant diversity and plant growth. Often overlooked, the rest period is beneficial even if it is simply practiced between two main pastures. Typically, more paddocks yield greater results, but rotating between two to four pastures is still favorable.

Before winter feeding has moved out of your memory, remember, you do not want to do any more than absolutely necessary. Rotational grazing pasture and stockpiling in the fall are ways to graze more forage and feed less hay. Remember to forage-test hay soon after harvest, and store the best hay in the dry. Nutrient content will not change for hay stored in the dry. If you do not have hay storage capability currently, do a partial budget analysis, which will likely provide evidence that a simply constructed hay-storage facility will pay for itself based on improved hay quality at feeding and more-efficient utilization.

Spring-calving herds (January-March)

General. Calving season is winding down. Continue to observe late-calving cows frequently.

Calving records should be complete and up-to-date.

Nutrition and forages. Continue to offer a high-magnesium mineral to prevent grass tetany. Monitor intake to ensure cows are consuming the recommended amount. No other source of salt or minerals should be available.

This is the time to put into place a rotational-grazing management system that will provide a rest period for pastures. During rapid growth move more quickly to the next paddock and leave some residue.

Make plans to store your high-quality hay in the dry.

Collect and submit forage samples for nutrient analysis.

Herd health

Consult with your veterinarian concerning a prebreeding vaccination schedule for the cow herd, yearling heifers and bulls. Plan early to allow a 30-day vaccination window prior to breeding season.

Plan a parasite- and fly-control program for the herd, and begin planning vaccination and preconditioning protocol to be used for the calf crop.

Reproduction. Finalize plans and protocols for the breeding season. Establish

calendar dates for successful timing of the synchronization program to be used during breeding season. Have supplies and semen on hand.

Breed heifers two to four weeks ahead of mature cows to allow for a longer postpartum interval prior to the second breeding season.

Schedule and conduct breeding soundness exams on herd sires, including annual vaccinations.

Manage bulls properly during the breeding season. Observe bulls frequently to confirm breeding activity and soundness, and monitor cows for repeat estrus. Avoid commingling mature and young bulls, as older bulls will be dominant. As a rule of thumb, yearling bulls should be exposed to a number of cows equal to their age in months (i.e., 18-month-old bull with 18 cows).

Fall-calving herds (September-November)

General. Schedule and conduct pregnancy diagnosis with your veterinarian following breeding season. 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).

Evaluate potential options for marketing of calf crop, including timing of weaning to meet operational goals. Calculate breakevens on various marketing options and consider risk-management strategies.

Reimplant commercial calves.

Nutrition and forages. 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.

Herd health

Consult with veterinarian on vaccination protocol for calf crop. Design vaccination and weaning program around marketing goals and objectives.

Plan parasite- and fly-control program for cows and calves.

Genetics

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

