



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, bull feeding trials, etc.
- Late May to early June is a good time to deworm cows and bulls that are grazing cool-season forages such as fescue and brome.
- 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 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

- Most agronomists and rangeland specialists agree that pastures and rangelands will require some time to recuperate from the extreme droughts of 2011 and 2012. Assuming adequate precipitation during the 2013 growing season, a delayed turnout (by as much as 30 days) and initial stocking rate reduction (by as much as 50%) is recommended on most pastures. The flexibility to increase stocking rate or harvest excess forage production may be advisable should forage production be better than expected.
- 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 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

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Managing Flies

As the weather warms up, horn flies begin to approach economic thresholds for grazing cattle. These small flies feed upside down on cattle backs in the morning, moving to the belly in the afternoon and complete their lifecycle by laying eggs in fresh manure. Once populations exceed 200 flies per animal, they are reducing profitability by decreasing gain by 10 lb.-20 lb. during the grazing season.

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

Face flies are not blood-feeding pests, but they do 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. Maintaining farm sanitation by cleaning up bale feeding areas or filling in mud holes can reduce breeding areas for flies reproducing in decaying material. Consider

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planting pearl millet in bale feeding areas; this summer annual will “harvest” excess soil nutrients and can establish in bare areas after distributing the hay feeding waste and manure.

Chemical control methods such as fly-control sprays, tags, dust bags, pour-on dewormers, or mineral-based insect growth regulators should be managed to increase success while preventing resistance development. When using fly tags, rotate chemical classes so pyrethroids are not used more than once every three years and organophosphates are not used more than two years in a row. Rotate chemical classes in dust bags and sprays just as you would when using tags.

Delay starting spray- and tag-based fly control methods until economic thresholds are reached, so large fly populations are present when control is introduced and the control period is lengthened. Tagging cows at breeding or spring turnout, while convenient, reduces late-season control and can lead to resistant fly populations overwintering.

Mineral-based growth regulation is recommended to begin prior to fly season to ensure adequate chemical intake is achieved

when flies are reproducing. “Treating fresh manure” prior to flies reaching economic thresholds inhibits the lifecycle and reduces the initial population. Flies can travel reasonable distances, so simply inhibiting development using growth regulators may not provide adequate control if neighbor cattle remain untreated.

Attempting to minimize disease transfer is one reason fly control is implemented. Producers attempt to reduce 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, resulting in reduced animal performance. Flies also contribute to heat stress, causing cattle to bunch up and reduce animal cooling.

Whatever your reasons for implementing fly control, consider developing an integrated

pest-management program, which will differ slightly for each operation due to management and environmental differences. One key to developing an effective program is to follow label directions. Failure to follow label directions can contribute to resistant populations, control failure or excessive treatment costs.

Mid-South Atlantic Region

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

Although the first official day of summer is a month away, May signals the beginning of warm days. In most of the region it also represents the best time to harvest high-quality grass hay. Weather during this period often interferes with the best of harvest plans. Remember a couple of facts as you dodge showers:

1. Rain does less damage (nutrient and dry-matter loss) to fresh-cut forage as compared to forage almost ready to bale.
2. Hay quality is always changing and does not improve with time.

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 taken within 45 days of calf weaning measure).

