

Guide to abbreviations and acronyms

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

rollowing appreviations or expressions:	
\$Values 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
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
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-ch	neck pregnancy-check
Se	selenium
sq. ft.	square feet
SPA S	tandardized Performance Analysis
TB	bovine tuberculosis
TDN	total digestible nutrients
THI	temperature-humidity index
trich	trichomoniasis
Zn	zinc
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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

- ► 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**, University of California, 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 pregchecked 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 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.

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 lepto 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 should have been vaccinated at least 30 days prior to the start of the breeding period. This is also an excellent time to deworm cows. We prefer to use a pour-on dewormer 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 **Twig Marston**, University of Nebraska, tmarston2@unl.edu

Breeding season is beginning or continuing for many operations; therefore, both females and males must be reproductively fit.

- 1) Several estrus synchronization procedures have been developed. To determine the correct synchronization program to use, consider the following: age group of females (yearling replacement heifers vs. cows); commitment of time and effort for heat detection; potential number of females that are anestrus (days postpartum, BCS, calving difficulty); labor availability; and the return on investment for total commitment to the breeding program.
- 2) Handle semen properly and use correct AI techniques to maximize fertility.
- 3) Natural-service bulls should have body condition, eyes, feet, legs and reproductive parts closely monitored during the breeding season. Resolve any problems immediately.
- 4) All bulls should have passed a breeding soundness examination prior to turnout.

Begin your calf-preconditioning program. Vaccination, castration and parasite control at a young age will decrease stress at weaning

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time. This is the time to add value to the calf crop.

Implanting steer and heifer calves older than 60 days of age will increase weaning weight.

Properly identify all cows and calves. Establish premises numbers for compliance with state ID programs.

Use BMPs to establish sustainable grazing systems.

Use good management practices when planting annual forage sources and harvesting perennial forages.

Maintain records that will verify calving season, health programs and management practices.

Southeastern Region

by **Jane Parish**, Mississippi State University, jparish@ads.msstate.edu

Nutritional management. Stock pastures according to current and projected available forage amounts. Use electric fencing for rotational-, limit-, strip- or creep-grazing systems. MiG systems are essential for efficient forage use.

Fertilize warm-season pastures according to soil test recommendations. Incorporate clovers into pastures to reduce nitrogen fertilizer needs and improve forage quality. Sprig hybrid Bermuda grass before moisture becomes limiting. Plant summer-annual forages. Graze sod-seeded annual ryegrass pastures to prevent shading of warm-season forages.

Manage pastures to graze young growth

and harvest excess for hay. Make sure hay equipment is ready for operation. Record hay yields, forage-test each cutting and store hay to minimize storage losses.

Grass tetany may occur in lactating cows grazing lush pastures. Feed a high-magnesium mineral supplement to cattle on these pastures. Provide proper mineral supplementation and fresh water at all times.

Health management. Make sure adequate shade is available. Artificial shades need to allow adequate air movement. Minimum shade requirements are 18 sq. ft. per head for 400-lb. calves and 25 sq. ft. per head for 800-lb. stockers.

Fly and anaplasmosis control programs need to be implemented as insect populations start to build. Rotate fly control product chemical classes. Include internal parasite control practices and BQA- consistent practices in the health program. Look into state animal disease monitoring and certification programs. Apply for a premises ID number. Work to develop a ranch-level disease and disaster plan.

Marketing and financial management. Form alliances with neighbors for group cattle marketing and bulk purchases. Continue good production and financial recordkeeping.

Spring-calving herds

Calving and calf management. Continue close monitoring of pregnant females yet to calve. Calving records should be well-organized now. Submit calving information early to breed associations to take advantage of lower fees. Consider marketing latecalving females that do not fit the calving season.

Breeding management. Obtain supplies and prepare facilities for breeding. Implement heat synchronization protocols, breeding heifers ahead of the cow herd. Maintain breeding records, including heat detection records, AI dates, dates bulls turned in and out, herd female and breeding group ID, dates bred, returns to heat and expected calving dates.

Nutritional management. Make sure the mature cow herd is in good condition to rebreed early. Supplement if cows are thin. Place cattle with the highest nutritional needs on the highest-quality grazing and hay. Provide additional nutrients to thin or growing bulls.

Fall-calving herds

Breeding management. Schedule pregnancy checks. Cull cows based on

pregnancy status, soundness, health status and performance. Market cows based on market conditions and cow body condition. Establish permanent ID for replacement heifers.

Calf management. Implement calf preconditioning programs, including vaccinations, weaning strategies that minimize stress, and bunk-breaking. Continue a high level of nutritional management for early-weaned calves. Make sure that registered cattle are weaned within acceptable weaning age windows. Collect and report weaning performance data. Run breakevens on retained ownership options. Consider risk management strategies. Share information on feeder-calf marketing programs with bull customers to help market their calves.

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