



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 to a young bull as his 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 writing this in late-March, the tick population seems to have weathered the mild winter in great shape as newborn calves are showing signs of tick infestation within just a few days. This serves as a reminder that a sound tick- and fly-control program should be a priority, especially with recent losses to anaplasmosis in this region. Be sure to consult your local veterinarian or a livestock entomologist to determine what products and programs are effective in your area for the control of these disease-carrying vectors.

► If your parasite-control program includes feeding chlortetracycline in a feed or mineral product, remember that this will be the last year that these products will be available over the counter. Beginning Jan. 1, 2017, the new Veterinary Feed Directive (VFD) rules will be implemented. A VFD drug is an animal drug intended for use in

or on animal feed requiring the supervision of a licensed veterinarian. Details of the VFD rules and recordkeeping requirements are available in this extension publication, <http://dasnr22.dasnr.okstate.edu/docushare/dsweb/Get/Document-9930/VTMD-9136.pdf>. Now is the time to be visiting with your local veterinarian about the need and effectiveness for this drug in your feed or mineral this year and especially for 2017.

- ▶ Plant Sudan grass, Sudan hybrids and crab grass 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 pregnancy-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

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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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Maximizing the value of estrus synchronization

Although the focal point of most breeding-season strategies is to determine which bulls will be added or subtracted from the lineup, it is equally as important to evaluate the method by which these genetics will be introduced into the cow herd.

Given the current yearly costs of the breeding herd hovering around \$800 per head in the Midwest and the sustained volatility of commodity markets, it is imperative that producers strive to implement genetics that allow for greater production with fewer inputs. One potential way to increase production and minimize input is through the use of AI when used in conjunction with estrus synchronization. In a study published in the *Journal of Animal Science* in 2012, it was reported that cows submitted to a timed-AI (TAI) estrus-synchronization protocol had a return on investment that netted \$49 more per cow exposed than cows which were only exposed via natural service. These monetary gains associated with the use of estrus synchronization and AI are derived from three primary areas:

1. Estrus-synchronization protocols that incorporate a period of timed-AI ensure that all cows are given the opportunity to conceive earlier in the breeding season, resulting in a greater proportion of older, heavier calves at weaning.
2. AI allows for introduction of proven genetics with increased EPD accuracies, thus potentially increasing preweaning average daily gains for calves born to AI.
3. Getting more cows pregnant to AI has the potential to reduce (but not eliminate) the number of bulls needed on hand.

Although use of estrus synchronization and AI can be financially rewarding, given the number of synchronization programs available to select from, as well as the substantial differences in implementation schemes, choosing the one that is correct for a specific farm or ranch can be a bit overwhelming.

To assist producers in identifying which programs are a good fit for them, the Estrus Synchronization Planner (www.iowabeefcenter.org/estrus_synch.html) has been developed by the Iowa Beef Center

in conjunction with the Beef Reproduction Task Force. This free, Microsoft Excel-based program contains a current list of approved protocols for estrus synchronization that allows producers to compare labor and cost differences between protocols.

In addition, the Estrus Synchronization Planner can assist producers in developing a calendar that outlines daily activities for the synchronization program selected. This is the most important aspect of the program, because to maximize the potential of estrus synchronization and AI, it is vital that the synchronization protocol be strictly adhered to. Just as importantly, however, producers

should select the protocol that best fits their operation based on labor, facilities and management schemes.

One question that often arises is how narrow the calving window may be in females synchronized for AI on the same day. This can be of particular concern in some herds where calving facilities, especially for first-calf heifers, are limited. However, a previous study reported that heifers that became pregnant to AI on the same day had calves born across a span of 28 days with only 14% of the heifers calving on the most active day. This is not widely different than what may be observed in some natural-

service environments, and in most instances not a reason to avoid the use of estrus synchronization.

For further assistance in developing an AI and estrus-synchronization program tailored to your farm or ranch, producers should work with a reproductive specialist in their area. A little bit of time spent now in planning a breeding-season estrus-synchronization program could dramatically enhance profit margins for years to come.

