



Angus Advisor

► APRIL 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*,
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Spring-calving herds

Plan to implement estrous-synchronization systems for heifers and cows. Some systems require initial management steps as early as 31 days in advance of the targeted initial breeding date. If not already done, purchase AI supplies, acquire semen, and check facilities and equipment. Don’t forget to find and test the thawing bath before the first cow walks into the chute for breeding. An excellent resource for this planning process is the Estrus Synchronization Planner at www.iowabeefcenter.org/estrus_synch.html.

If not previously done this year, consult your veterinarian about vaccinating cows a minimum of 30 days prior to breeding and prepare for spring “turn-out” or “branding” vaccinations for the calves.

Conduct breeding soundness exams for all herd sires.

Fall-calving herds

Consult your veterinarian to plan the vaccination program for fall-born calves and to purchase the necessary supplies. An ideal situation is to vaccinate two to six weeks prior to weaning and again at weaning. Implant any steer calves and heifers not intended to be kept as replacements.

Determine your preferred timing for weaning and prepare facilities. Inventory veterinary and feed/supplement supplies for the weaning program.

General recommendations

1. As of late February, much of the Southern Great Plains region is once again in the “abnormally dry” to “severe drought” condition categories, according to the U.S. Drought Monitor. This information is readily available at <http://droughtmonitor.unl.edu/>. Hopefully, this situation has changed by the time this column is published. If not, pasture forage and hay production will be limited once again this summer, and producers will need to be planning accordingly. Much of the forage produced during the growing season is determined by early spring soil moisture conditions. In other words, mid- to late-spring rains will help, but generally do not completely offset early-season deficits.

2. Introduced warm-season forages, such as Bermuda grass and Old World bluestem, should be fertilized in late April through mid-May. Approximately 50 lb. of nitrogen (N) is required to produce about 1 ton of forage. Efficiency of nitrogen use is improved with multiple applications (generally two or three).

3. High-magnesium mineral supplements should be provided for cattle grazing cool-season forages through the month of April.

4. A moderate- to low-phosphorus (P) mineral supplement (10% phosphorus or less) is recommended for most classes of cattle and forage types during the lush spring growing season.

5. Plan a fly- and tick-control program. Check spraying equipment, dust bags and oilers, and purchase needed chemicals or tags for fly and tick control. New-generation ear tags are highly effective. Check with your veterinarian for tags that are working well in your area.

6. Establish new stands of lovegrass in April and May. Spray weeds in Bermuda grass pastures in late April or May. Be sure to read the herbicide label for the most effective rate and timing of application.

Midwest Region

by **Justin Sexten**, *University of Missouri*,
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Managing spring forages

As winter weather gives way to spring, planning pasture management for the upcoming grazing season should begin. Spring pasture management is key to setting the pasture up for the remainder of the growing season. Over- or undergrazing in April will impact forage growth and quality in July.

As cool-season forages begin to break dormancy, growth is supported by root reserves until there is sufficient leaf area to support photosynthesis. For tall fescue



and other cool-season forages, producers should wait until 4 to 6 in. of leaf growth are available to minimize root reserve use during early growth. Allowing cattle to continually graze new leaves before adequate leaf area is present consumes root reserves, potentially reducing long-term plant persistence. Initial root reserves may be lacking in drought-stressed or overgrazed pastures, so plan to delay early-season grazing of previously stressed pastures.

In spring-calving cow herds spring pasture management can be challenging due to calving and breeding management. In these herds the same pastures are often grazed at the same time each year. Consider rotating calving and breeding pastures from year to year to allow these heavy-use areas the opportunity to rest during early spring. Rotating calving areas over time may have the added benefit of reducing scour potential.

Grazing early spring forage growth can present a dry-matter intake challenge due to high forage water content. Many producers will refer to early-season grass as “washy;” the reason is that early growth may be 70% water or more, so cows needing to consume 35 lb. of dry matter need to consume more than 110 lb. of forage to meet dry-matter intake demands. With limited leaf area and high water content, cows may be on a restricted diet due simply to inability to consume adequate dry matter in 24 hours. Consider supplementing early-season forage growth by allowing dry hay access or continue feeding supplemental feed to ensure cows can consume sufficient dry matter.

Pasture fertilization may be a viable option for producers who lost rental acres or had pastures converted to row crops. Fertilized pasture is only useful if you can consume the forage before it becomes overly mature. In most cases, additional forage growth in spring is not necessary in a grazing system. However, pastures used as hay fields would benefit from fertilization due to earlier green-up and improved yield. For those challenged to harvest hay in a timely manner, consider not spreading fertilizer to delay spring growth and prevent forages from becoming overly mature before harvest.

Once adequate leaf area is available, management should focus on maintaining forage height between the eyes and nose of the cow when her head is down. These are good reference points for grazing management as forage shorter than a cow’s nose is getting overgrazed, while grass taller than her eyes is getting excessively mature. One challenge in the spring is balancing grass needing grazed for the first time and previously grazed pastures needing grazed again.

There are two options for managing

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forage growth in early spring, hay harvest or managed grazing systems. For producers with grazing as the only pasture-management option, management groups are key to efficient forage harvest. Allow stocker cattle or young cows nursing calves access to the best-quality pastures, while overly mature pastures are harvested with dry or mature gestating cows. Operations with plans to harvest hay can minimize overgrown pastures by timely hay harvest.

Untimely hay harvest results in poor-quality hay and increases the pasture recovery time. Producers harvesting hay early allow hayed acres to return to grazing earlier and take advantage of cooler, wetter growing conditions. Delayed hay harvest may improve hay yield, but grazing yield will be reduced as a result.

Finally, while not directly forage-management related, the season for grass tetany is fast approaching, so plan to feed a high-magnesium mineral ($\geq 10\%$ Mg) 30 days prior to green-up, allowing cattle time to increase magnesium intake prior to the increased magnesium demand associated with milk production. High-producing and older cows are most at risk for grass tetany due to reduced bone magnesium

mobilization and increased milk-production potential.

Western Region

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

Spring-calving herds

The main focus is to prepare for the breeding season.

Genetic management

Sire selection. Sire selection is one of the most important management decisions made each year in a purebred cattle operation. The challenging and difficult aspect concerning sire selection is predicting industry cycles and trends. What kind of cattle are going to be the most sought after in three to five years? Those who are able to forecast or predict these trends will always be in the driver's seat from a genetic standpoint.

In addition, I think it is most important that we use sires that are going to produce daughter progeny that we can build a herd around. Many times we use sires because we believe they will produce bull progeny that we can market from a phenotypic and genetic standpoint. That is fine; however, it is hard to justify the time and expense

associated with AI if the daughter progeny are not the kind of females that will improve our cow herd.

Reproductive management

Semen. Get semen ordered early to avoid last-minute problems. Do not try to save money on semen — cheap semen is the most expensive item you can ever buy.

Synchronization protocol. If you are going to use estrous synchronization, now is the time to decide which protocol is going to work best in your production situation. Avoid programs that require excessive amounts of animal handling and trips through the chute prior to breeding. These programs are expensive from both a labor and product standpoint. In addition, animals are stressed each time that cows and calves are gathered and sorted for processing. (The newsroom at www.appliedreprostrategies.com provides a wealth of information on the various protocols.)

Heat detection. Heat detection is often the most overlooked factor influencing the success of AI programs. Effective heat detection is achieved by developing the skills or ability to be able to pick up all the subtle signs of heat and being able to catch

the females that never do exhibit standing estrus.

AI equipment. Have extra AI supplies on hand and thoroughly clean all breeding equipment (including the thaw thermos) prior to the time they are needed for the start of the breeding period.

Semen and trichomoniasis test. Semen- and trich-test bulls far in advance of the breeding season. If problems arise, replacement bulls can be located prior to turnout.

Nutritional management

Mineral supplementation. Be sure females are receiving adequate levels of calcium, phosphorus and trace minerals that are deficient in your area. Mineral boluses or injectable products can be used in addition to loose or block mineral products.

Protein and energy supplementation. Normally, by late spring forage resources are at their peak from both an energy and a protein standpoint. Therefore, usually supplemental feeding is not needed at this time of year.

Health management

Vaccinations. Make certain females and

service sires are vaccinated at least 30 days prior to the start of the breeding period. I recommend vaccinations that include fetal protection against PI-BVD.

General management

Late spring is a good time to start spraying fencelines and to be certain that irrigation lines and ditches are in good repair prior to the start of the irrigation season if your operation includes irrigated pasture or hay fields.

Fall-calving herds

Hopefully, cows and calves are on cruise control. If fall-calving cows and calves are grazing native foothill rangeland, normally late spring is the time of the year that cattle require very little attention or management. However, with the severe drought this year that has not been the case. Many areas have started to get moisture, and, hopefully, by the time this article is printed, many areas in the West will be much better in terms of moisture and forage production. Plans should be developed to administer preweaning vaccinations to bull and heifer calves two to three weeks prior to weaning.

Mid-South Atlantic Region

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

After a cold and snowy winter, spring always offers a new perspective to daily chores and activities. This new perspective is also something to apply to cattle enterprises. The industry is operating at record prices along with reduced input costs compared to recent times, creating a situation where we have no history on which to lean. The near-term outlook is very favorable and shows no major change from where we are today.

The playing field of revenues vs. costs suggests that some management practices may need to be reevaluated. The perennial statement "if it costs more than it returns, then don't do it" is based on both costs and returns, and the relationship between these two factors has changed over the course of the last several months. The value of today's calf crop justifies a reexamination of return on investment for spending additional dollars to obtain an additional calf born or to put on an extra pound of weaning weight. Management practices that affect return to

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estrus, pregnancy rate and weaning weight should be reconsidered in terms of the present economic climate.

Spring-calving herds (January-March)

General

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

Tag, tattoo, record birth weight, calving-ease score, teat/udder score and mothering ability of the dam. Keep accurate records at birth to comply with age- and source-verification requirements.

Monitor young calves for scours. Keep calving area and paddocks with pairs clean and well-drained. Move pairs to new pastures or locations and reduce commingling of newborn calves with older calves to help reduce exposure and transfer of scours.

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.

Evaluate growth of yearling heifers with the goal of reaching 60%-65% of mature

weight by breeding. Depending on forage quality, supplementation may be needed to meet weight gain target.

Offer medium-quality hay as cows are turned out on pasture and use hay disappearance as a barometer of dry-matter needs of the herd.

New forage growth is very digestible, high in protein and high in moisture content.

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.

Monitor calf health closely, particularly for signs of scours and pneumonia. Have treatment supplies on hand.

Observe newborn calves to ensure colostrum intake in the first few hours of life. Provide selenium and vitamins A and D injections to newborn calves. Castrate commercial calves at birth.

Reproduction

Finalize plans and protocols for breeding season. Establish a calendar to map the timing of the synchronization program to be

used during breeding season. Have supplies and semen on hand.

Breed heifers 2-4 weeks ahead of mature cows to allow for a longer postpartum interval prior to the second breeding season.

Schedule and conduct breeding soundness exams (sometimes referred to as BSEs) on herd sires, including annual vaccinations.

Manage newly acquired herd sires properly to prepare them for the breeding season. Yearling bulls often lose 100 lb. or more during their first breeding season. Adjust them to the feed and environment of their new home, and commingle bulls of same age/weight for a period of time prior to turnout. Ample exercise, in combination with a proper nutritional program, is essential to make them physically fit for the breeding season.

Genetics

Finalize genetic goals and selection criteria for the upcoming breeding season (both AI and natural-service sires).

Collect remaining yearling performance data (weight, height, scrotal, ultrasound) in seedstock herds.

Fall-calving herds (September-November)

General

Schedule and conduct pregnancy diagnosis with veterinarian 45-60 days following breeding season.

Evaluate potential options for marketing of the 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

Begin creep-feeding or creep-grazing of calves if desired.

Cows are entering the latter portion of lactation; above-average to good-quality hay should meet nutritional requirements.

Although pasture green-up is beginning, hay should continue to be offered until consumption declines significantly.

Reserve high-quality hay and a pasture area for calves postweaning.

Herd health

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

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).

