



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 |

Southeastern Region

by *Lawton Stewart, University of Georgia, lawtons@uga.edu*

With cattle prices high, creep feeding is a no brainer, right?

Part 2: Looking past weaning

Last month we discussed creep-feeding from the most obvious angle, adding weight to your calf crop. However, the truth is, creep-feeding has the potential to affect much more than the selling price and weight of the calves you sell. The effect of creep-feeding on the management of the entire herd is a critical component of your operation and can resonate well past the marketing of your calf crop. Remember, the practice should be treated as a management decision and not an annual management practice. From a management standpoint, a few points to consider:

1. Postweaning performance of stockers and feeders. A feeding strategy that affects the growth rate of cattle during one phase of growth will ultimately affect growth and rate of gain in subsequent phases. The effect of creep-feeding on postweaning performance is dependent on the energy level of the ration and the growth potential of the cattle. A few observations:

- If they gain quickly preweaning, they will slow down postweaning.
- Bull calves show less reduction in postweaning gain than heifers. This suggests calves with more growth potential can use the pre- and postweaning nutrition more efficiently.
- Calves placed directly onto a finishing diet perform better during the first month of feeding. This is due to the familiarity of the creep-fed calves to a trough and feed.

d. Calves placed directly into the feedlot typically finish in fewer days than calves that are not creep-fed.

2. Heifer development. Creep-feeding has the potential to affect the lifetime productivity of replacement heifers. Typically, the strategy is to creep-feed future replacement heifers so they will breed in a timely manner. However, high rates of gain preweaning on a high-concentrate diet can be detrimental to future herd performance. Increased fat deposition in the udder of growing heifers impairs mammary development and subsequent milking ability. A 21-year study from Indiana shows that heifers creep-fed a high-concentrate diet wean fewer, lighter calves and have a shorter productivity time (Table 1). The decrease in lifetime productivity is likely related to the degree of fatness of the heifers at weaning. This does not infer that creep-feeding of replacement heifers is not recommended; however, the practice should be evaluated year to year. If adequate cow milk production and forage conditions are available, creep-feeding may not be needed.

3. Selection for milk production. Creep-feeding tends to minimize differences in weaning weight. This can be beneficial for developing a uniform group for marketing, but may mask the poor milking performance of cows. Calves of poor-milking cows may consume more feed to make up for receiving less milk from the cow. If culling and selection are based on weaning weight, weigh calves prior to the creep-feeding period to obtain an estimate of the cow’s performance.

Through the topics discussed in this issue and the previous, we can see this practice touches all aspects of your operation. Without proper consideration, creep-feeding

Table 1: Performance of cows that were creep-fed or not creep-fed as calves

| | Treatment | |
|-------------------------------------|-----------|-------|
| | No Creep | Creep |
| No. of cows | 110 | 100 |
| No. of calves | 702 | 604 |
| Calves weaned per cow | 6.38 | 6.04 |
| Cow age at birth of last calf, year | 8.44 | 7.94 |
| Calf birth weight, lb. | 66.7 | 65.3 |
| Calf 210-day weight, lb. | 426 | 417 |

Source: *J. Anim. Sci.*, 1981, 53:33.

has the potential to be a value-adding tool or a well-disguised money pit. This year, before you set up the creep feeder and buy feed, do a little math to make sure it's going to put money back in your pocket.

Midwest Region

by **Twig Marston**, University of Nebraska,
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Many producers should consider calving in April. Stress is minimized, and forage/grass management may be optimized.

- ▶ Manage cows to maintain or improve body condition prior to the breeding season (cows should be in moderate body condition by the start of the breeding season to maximize fertility).
- ▶ For thin, young cows, consider feeding systems that will increase energy intake to improve rebreeding rates. Consult your nutritionist.
- ▶ Mineral supplementation should include greater levels of magnesium [intake should be between 15 and 30 g per head per day, or at least 11% of the mineral mix] for grass tetany prevention.
- ▶ Plan your breeding season, both AI and natural service. Make sure all supplies and semen are on hand prior to the breeding season. Review proper semen handling and AI breeding techniques to maximize your efforts. Use approved heat synchronization programs (check with semen suppliers, Extension faculty, herd consultants). For natural-service programs, assign yearling bulls to 10-15 cows; 2- and 3-year-old bulls to 20-25 cows; and older bulls to 25-40 cows. Some suggest the service capacity of a yearling bull (less than 24 months) is equal to his age in months at turnout. A natural breeding season from 60 to 90 days should be optimal.
- ▶ Bulls should be in good body condition prior to the breeding season. Thin bulls can run out of stamina. Now is the time to make sure bulls are physically capable of performing for the upcoming summer breeding season.
- ▶ Perform breeding soundness examinations on all bulls. Check for aftereffects of frostbite.
- ▶ Breed replacement heifers so they will calve when forage resources will allow them to grow, milk and return to estrus when 2 years old. Some producers will breed heifers three weeks prior to the mature cow herd to give them a greater chance to rebreed as 2-year-olds; others will match forage resources to reduce costs.
- ▶ Maintain top management concerning calf scours (sanitary conditions, early detection, electrolyte/dehydration therapy).

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- ▶ Vaccinate calves as per veterinarian consultation. Castrate males that are not candidates for breeding stock prior to pasture turnout. Implant calves that are not candidates for herd replacement when greater than 90 days of age unless they will be enrolled in a natural program.
- ▶ Wait to apply fly control until critical numbers are reached (100-200 horn flies per animal).
- ▶ Deworm cows and bulls if needed. Expect performance response to be variable, dependent on location, weather, grazing system, history, infestation level and management.
- ▶ Use prescribed burning techniques to eradicate Eastern Red Cedar trees and improve forage quality.
- ▶ Good fences make good neighbors. Summer pastures should have had fences checked, repaired or replaced by now.
- ▶ Check equipment (sprayers, dust bags, oilers and haying equipment) and repair or replace as needed. Have spare parts on hand; downtime can make a large difference in hay quality.

Southern Great Plains

by **David Lalman**, Oklahoma State University, david.lalman@okstate.edu

Spring-calving herds

1. 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 in the chute for breeding.

2. The anestrous period in cows calving at 2 years of age is about two to four weeks longer compared to mature cows. Therefore, many producers choose to initiate the breeding season for virgin heifers two to four weeks in advance of mature cows.

3. Research has demonstrated that bull exposure initiated within 30 days of calving reduces the anestrous period by one to two weeks in 2-year-old cows. This can be accomplished with a good fence or a surgically altered bull.

4. In one study with 2-year-old cows, a high plane of nutrition (resulting in cow weight gain) during the breeding season resulted in a 76% first-service conception rate compared to a 58% first-service conception

rate in cows that were provided a maintenance plane of nutrition. Providing 2-5 pounds (lb.) per head per day of an energy supplement may be necessary to achieve a high plane of nutrition in areas where abundant forage is not available until mid- to late-April.

5. If not previously done this year, consult your veterinarian about vaccinating cows a minimum of 30 days prior to breeding.

6. Conduct breeding soundness exams for all herd sires if not completed in March.

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. If not done in March, implant steer calves and heifers not intended to be kept as replacements.

General recommendations

1. 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).

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

3. 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.

4. 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.

5. 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.

Western Region

by **Randy Perry**, University of California, 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, supplemental feeding is not usually 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

Cows and calves are on cruise control.

If fall-calving cows and calves are grazing native foothill rangeland, late spring is the time of the year that cattle require very little attention or management. Plans should be developed to administer preweaning vaccinations to bull and heifer calves two to three weeks prior to weaning.

