



Angus Advisor

► JANUARY 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

Western Region

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

Fall-calving herds

The main focus is getting cows bred.

Heat detection and AI breeding.

Accuracy with heat detection and taking the time to be precise with the small details of AI are both very important in determining the level of success of an AI program.

Semen. Semen handling is one of the small details that is often overlooked and also can be very important in terms of influencing the success of an AI program.

Natural-service bulls. Bulls are probably already turned out or will be shortly. If females are in pastures where they are easily observed, record natural-service dates.

Nutritional management

Mineral supplementation. Mineral supplementation is important in achieving optimal reproductive performance. Although females should be supplemented on a year-round basis, the breeding season is the most critical period. Mineral supplements should be formulated to meet deficiencies specific to your region or area. Consider mineral supplements that include chelated products, especially during the breeding season.

Protein and energy supplementation. It is critical that both protein and energy requirements of females are being met during the breeding season. Females should be in a state of positive energy balance, or gaining weight, during the breeding season, as energy balance has a significant influence on fertility or conception rate.

Health management

Vaccinations. If not already done, calves should receive their first round of vaccinations. Producers should consult with their veterinarian in developing their vaccination protocol.

Treatment protocol. Treatment protocols should be on hand for both scours and pneumonia in suckling calves, and both should include first and second treatment options.

Spring-calving herds

The main focus is the calving season.

Reproductive management

Calving management. Supplies should be on hand and the proper equipment should be available to assist females with problems at calving. Be sure that your personnel are properly trained in the most current procedures recommended for assisting females experiencing calving difficulties.

In order for maximal absorption of maternal antibodies, calves should nurse within the first 6 hours after birth. A supply of frozen colostrum should be on hand and should be replaced at the start of each calving season. Extra milk from a mature cow taken shortly after calving is the best source of frozen colostrum.

Nutritional management

Mineral supplementation. Be sure that cows are receiving adequate levels of calcium, phosphorus and trace minerals that are deficient in your area.

Body condition. The target level of body condition at calving is a BCS of 5 (scale = 1 to 9) for mature cows and 6 for 2-year-old heifers. For more information visit www.cowbcs.com.

Protein and energy supplementation. Both protein and energy requirements need to be met in order to achieve the desired level of body condition as described in the previous paragraph.

Heifer and bull development. Hopefully, both bulls and heifers are performing at levels that will allow achievement of desired average yearling weights.

Health management

Treatment protocol. Have treatment protocols and products on hand for both scours and pneumonia in suckling calves.

Midwest Region

by **Patrick Gunn**, Iowa State University, pgunn@iastate.edu

New Management Practices for the New Year

I hope everyone experienced a great holiday season filled with family and fun. As 2016 gets started off with a bang, I have taken

a moment to discuss a few best-management practices that I believe every producer should be implementing this year.

1. *Nighttime feeding for daytime calving.*

Just because we all gained some weight from the holiday feasts does not mean those calories have to be burnt assisting calving cows all night. Although the physiology is still not well-understood, multiple studies have shown that feeding cows in the evening leads to a significantly greater proportion of cows that calve during the day.

Most studies have evaluated feeding cows either at dusk or 9 p.m., and, in most cases, the result has been approximately 80% of the cows calving between 6 a.m. and 6 p.m. Perhaps the best thing about nighttime feeding is that it takes almost no advanced planning to see results. Existing data indicate that cattle on a nighttime feeding regimen for as little as a week before calving have similar calving patterns as those fed in the evening for multiple weeks.

Because many operations do not feed a total mixed ration to the cow herd, but rather supplement grain to a round-bale-based diet, there can be logistical challenges. However, many producers have experienced success by restricting access to hay during the day and turning cows on to bale feeders from dusk to dawn. Limited access should not cause problems with total daily intake if forage quality is adequate. Research conducted at Purdue University suggests that cows can consume all of the dry forage they are going to eat in 6 hours per day.

2. *Be proactive about colostrum.* In my November column, I highlighted how late-gestation nutrition can impact colostrum quality; however, colostrum quality is irrelevant if calves do not access it. Particularly with first-calf females, it is prudent to determine if the cow has come to her milk at the time of calving.

Many producers are unaware that calves need to ingest 6%-10% of their body weight in colostrum in the first 24 hours of life (and within 12 hours is better). Thus, just confirming the calf has nursed does not mean it has met its requirement. Have both colostrum replacers and colostrum supplements on hand and ready to use when in doubt about whether or not the calf has nursed enough on its own. If you have access to a dairy and prefer to source colostrum from it, remember that this colostrum is less concentrated in immunoglobulins compared to beef colostrum; thus supplementation rate will need to be increased. Nothing eats up profit like sick cattle, so be proactive in your colostrum management to prevent health problems later.

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3. Foot scoring. Plain and simple, foot structure impacts profit. Whether it's longevity in the cow herd, or lameness in the feedlot, optimal production works from the ground up. Thus, it is no secret that foot scoring is a process that I am fully behind, and I commend the American Angus Association and Angus Genetics Inc. for implementing this system. Information on foot scoring can be found through various avenues, but this guideline is the one I find most helpful and the one I point producers to: www.angus.org/performance/footscore/footscoreposter.pdf.

As always, consult with the team of experts you have assembled, including your nutritionist, genetics provider, beef extension specialist and herd health veterinarian.

Southern Great Plains

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

Spring-calving herds

Years of research show that reproductive success is highly dependent on the plane of nutrition during the critical third trimester of pregnancy. Due to rapid fetal growth,

energy and protein requirements are approximately 25% greater during late gestation compared to mid-gestation. The nutrition program should be adjusted accordingly. A 1,200-lb. Angus cow in good body condition requires a minimum of about 12.9 lb. of TDN and 1.9 lb. of protein per day during late gestation. Given similar body condition and stage of production, a 1,500-lb. Angus cow requires approximately 15.3 lb. of TDN and 2.2 lb. of protein to maintain her body condition and fetal growth.

Hay or other forages should contain a minimum of 54% TDN and 8% protein to meet requirements for maintenance prior to calving. If the forage does not meet these standards, then a complementary supplementation program should be employed.

Prepare calving facilities and equipment. Purchase and organize calving supplies such as tags, navel dip, tattoo equipment and ink, calf scales, etc.

Visit with your veterinarian to develop a written protocol before the calving season starts. This protocol should include what to do, when to do it, who to call (if someone

besides your veterinarian is to be called), phone numbers, how to know when the veterinarian should be called, etc.

The process of parturition (calving) is generally divided into three stages:

- ▶ Stage 1 is the dilation of the cervix and occurs 4 hours to 24 hours before the actual birth.
- ▶ Stage 2 is the delivery process and begins when the fetus enters the birth canal. The beginning of Stage 2 is usually identifiable when membranes or a water bag appears at the vulva. Published research indicates that Stage 2 averages about 30 minutes in mature cows and about one hour in first-calf heifers. Intervention should be considered (refer to your protocol) if there has been no progress in the birthing process after 30 minutes in mature cows or one hour in first-calf heifers.
- ▶ Stage 3 includes expulsion of the placenta and involution of the uterus.

Check first-calf heifers several times daily for possible calving difficulties. Feed during evening hours to encourage daytime calving.

Fall-calving herds

Removal of bulls toward the end of January or early February is necessary to maintain a controlled breeding season of 60-70 days. If a creep-feeding program is desired, consider limit-feeding a high-protein (30%-40%) supplement as recommended in the Oklahoma Silver program. In this program, intake of protein supplement is limited by including 10%-12% salt in the creep feed and adjusting as necessary to target consumption of around 1 lb.-2 lb. per head per day. When available, small-grain winter pasture is an excellent creep-grazing resource for fall-born calves. A mineral supplement with elevated concentrations of calcium and magnesium should be provided to lactating cows grazing small-grain forage.

General recommendations

Distribute hay feeding as much as possible to minimize perennial grass stand damage and to evenly distribute nutrients from manure and wasted hay. Completely remove and discard plastic "net wrap" and plastic twine from hay prior to being fed. Test soil to determine phosphorus, potassium and lime needs for spring legumes, such as lespedeza, sweet clover, red clover and white clover. Plan the financial management program for the year, including cash flow, deadlines for payment of interest and quarterly tax payments.

