Guide to abbreviations and acronyms

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

IOllowii	ng abbreviations or expressions:
\$Value	s 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
brucelle	
BSE b	ovine spongiform encephalopathy
BVD	bovine viral diarrhea
Ca	calcium
CHAPS	Cow Herd Analysis and
0	Performance System
СР	crude protein
cwt.	hundredweight
DM	dry matter
EPD	expected progeny difference
ET	embryo transfer
FMD	foot-and-mouth disease
GnRH	gonadofronin-releasing hormone
GnRH IBR	gonadotropin-releasing hormone infectious hovine rhinotracheitis
IBR	infectious bovine rhinotracheitis
IBR ID	infectious bovine rhinotracheitis identification
IBR ID IM	infectious bovine rhinotracheitis identification intramuscular
IBR ID IM in.	infectious bovine rhinotracheitis identification intramuscular inch
IBR ID IM in. lb.	infectious bovine rhinotracheitis identification intramuscular inch pound
IBR ID IM in. lb. LCT	infectious bovine rhinotracheitis identification intramuscular inch pound lower critical temperature
IBR ID IM in. lb. LCT lepto	infectious bovine rhinotracheitis identification intramuscular inch pound lower critical temperature leptospirosis
IBR ID IM in. lb. LCT lepto Mg	infectious bovine rhinotracheitis identification intramuscular inch pound lower critical temperature leptospirosis magnesium
IBR ID IM in. lb. LCT lepto Mg MiG	infectious bovine rhinotracheitis identification intramuscular inch pound lower critical temperature leptospirosis magnesium management-intensive grazing
IBR ID IM in. lb. LCT lepto Mg MiG MLV	infectious bovine rhinotracheitis identification intramuscular inch pound lower critical temperature leptospirosis magnesium management-intensive grazing modified-live virus
IBR ID IM in. lb. LCT lepto Mg MiG MLV N	infectious bovine rhinotracheitis identification intramuscular inch pound lower critical temperature leptospirosis magnesium management-intensive grazing modified-live virus nitrogen
IBR ID IM in. lb. LCT lepto Mg MiG MLV N P	infectious bovine rhinotracheitis identification intramuscular inch pound lower critical temperature leptospirosis magnesium management-intensive grazing modified-live virus nitrogen phosphorus
IBR ID IM in. lb. LCT lepto Mg MiG MLV N P PI	infectious bovine rhinotracheitis identification intramuscular inch pound lower critical temperature leptospirosis magnesium management-intensive grazing modified-live virus nitrogen phosphorus persistent infection
IBR ID IM in. lb. LCT lepto Mg MiG MLV N P PI Pl3	infectious bovine rhinotracheitis identification intramuscular inch pound lower critical temperature leptospirosis magnesium management-intensive grazing modified-live virus nitrogen phosphorus persistent infection parainfluenza-3 virus
IBR ID IM in. lb. LCT lepto Mg MiG MLV N P PI Pl3 preg-ch	infectious bovine rhinotracheitis identification intramuscular inch pound lower critical temperature leptospirosis magnesium management-intensive grazing modified-live virus nitrogen phosphorus persistent infection parainfluenza-3 virus seck pregnancy-check
IBR ID IM in. lb. LCT lepto Mg MiG MLV N P PI Pl3 preg-ch Se	infectious bovine rhinotracheitis identification intramuscular inch pound lower critical temperature leptospirosis magnesium management-intensive grazing modified-live virus nitrogen phosphorus persistent infection parainfluenza-3 virus teck pregnancy-check selenium
IBR ID IM in. lb. LCT lepto Mg MiG MLV N P PI Pl3 preg-ch Se sq. ft.	infectious bovine rhinotracheitis identification intramuscular inch pound lower critical temperature leptospirosis magnesium management-intensive grazing modified-live virus nitrogen phosphorus persistent infection parainfluenza-3 virus teck pregnancy-check selenium square feet
IBR ID IM in. lb. LCT lepto Mg MiG MLV N P PI PI3 preg-ch Se sq. ft. SPA S	infectious bovine rhinotracheitis identification intramuscular inch pound lower critical temperature leptospirosis magnesium management-intensive grazing modified-live virus nitrogen phosphorus persistent infection parainfluenza-3 virus leck pregnancy-check selenium square feet tandardized Performance Analysis
IBR ID IM in. lb. LCT lepto Mg MiG MLV N P PI Pl3 preg-ch Se sq. ft. SPA S TB	infectious bovine rhinotracheitis identification intramuscular inch pound lower critical temperature leptospirosis magnesium management-intensive grazing modified-live virus nitrogen phosphorus persistent infection parainfluenza-3 virus seck pregnancy-check selenium square feet tandardized Performance Analysis bovine tuberculosis
IBR ID IM in. lb. LCT lepto Mg MiG MLV N P PI Pl3 preg-ch Se sq. ft. SPA S TB TDN	infectious bovine rhinotracheitis identification intramuscular inch pound lower critical temperature leptospirosis magnesium management-intensive grazing modified-live virus nitrogen phosphorus persistent infection parainfluenza-3 virus teck pregnancy-check selenium square feet tandardized Performance Analysis bovine tuberculosis total digestible nutrients
IBR ID IM in. lb. LCT lepto Mg MiG MLV N P PI Pl3 preg-ch Se sq. ft. SPA S TB TDN THI	infectious bovine rhinotracheitis identification intramuscular inch pound lower critical temperature leptospirosis magnesium management-intensive grazing modified-live virus nitrogen phosphorus persistent infection parainfluenza-3 virus teck pregnancy-check selenium square feet tandardized Performance Analysis bovine tuberculosis total digestible nutrients temperature-humidity index
IBR ID IM in. lb. LCT lepto Mg MiG MLV N P PI Pl3 preg-ch Se sq. ft. SPA S TB TDN	infectious bovine rhinotracheitis identification intramuscular inch pound lower critical temperature leptospirosis magnesium management-intensive grazing modified-live virus nitrogen phosphorus persistent infection parainfluenza-3 virus teck pregnancy-check selenium square feet tandardized Performance Analysis bovine tuberculosis total digestible nutrients

Southern Great Plains

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

Spring-calving herds

- ► Follow through on planned spring "branding time" herd health procedures.
- Consult your veterinarian regarding the need to deworm young cows and calves in June. This investment will depend a great deal on the location of your operation, forage species, stocking density, previous internal parasite management and other factors. More information is available now regarding parasite resistance to specific products, and your veterinarian will be aware of products and programs that should be appropriate in your area.
- ▶ June mid-day temperatures can suppress aggressive estrous activity. Therefore, visual heat detection should be done in earlymorning and late-evening hours.
- ▶ Turn bulls out with cows after the AI program is completed. The bull-to-cow ratio will vary depending on the number of cows or heifers serviced to AI and the age of the bull. A conservative rule of thumb is to expose bulls to about 10 cows per year of age, and up to 30 open cows.
- Pror breeders who choose to creep-feed calves grazing native pastures, consider using a limit-fed, high-protein creep beginning around the end of June. Locally, we refer to this approach as the Oklahoma Silver program, where calves consume around 1 lb. per day of supplement. Weight gain is improved substantially, and calves do not become fleshy compared to calves on free-choice, lower-protein creep-feeding programs. The conversion of feed to additional weight gain is drastically improved compared to a traditional creep-feeding program.

Fall-calving herds

▶In native rangeland grazing systems, commercial producers like to wean fall-born calves in June or July because the calves are big enough to make efficient use of high-quality, abundant summer forage. Consequently, those calves gain a lot of weight during this time period compensating for relatively low rate of gain throughout the winter. Actual (not adjusted) weaning weights of 675 to 750 lb.

- are not uncommon although the calves are 8 to 9 months of age. However, in a seedstock operation, this strategy can be hard on adjusted 205-day weaning weights. Consequently, seedstock producers generally graze winter annual forages and wean in April or May.
- At weaning, vaccinate calves according to your veterinarian's recommendations, deworm calves, weigh and condition-score cows, and weigh calves. Transfer records for your whole herd to the American Angus Association. Be sure to discuss with your veterinarian the need to include a coccidiostat in the water source or in the feed during the 28-day weaning period.
- ▶ A high-protein supplementation program, such as the Oklahoma Gold program, can facilitate around a 2-lb. ADG in weaned calves grazing native pastures with abundant forage. This program can be delivered every other day or three times per week.

General recommendations

- ▶ In Oklahoma, more foot rot cases are observed in June than any other month. Develop a plan for treatment with your veterinarian, and acquire the necessary supplies.
- ▶Plan to harvest native grass hay during early July to achieve near-optimum balance between quality and quantity of hay. Harvest Bermuda grass hay, or graze Bermuda grass at about 30-day intervals when precipitation is abundant. All else being equal (maturity, precipitation, soil fertility, etc.), Bermuda grass harvested for hay in June has higher digestibility than Bermuda grass harvested in the hot summer months of July and August.
- ▶Begin grazing Sudan grass and Sudan hybrids when 18- to 24-in. high, and be sure to check the plants for nitrates, particularly if the plants are droughtstressed.
- Consult a rangeland specialist or agronomist regarding use of herbicide to control sericea lespediza and other invasive plant species in pastures and rangeland. Many of the native woody plant (brush) species can be controlled during June while they are still actively growing.
- ► Federal and state estimated tax payments are due June 15.

Midwest Region

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

Parasite Control Part 1

By now, nearly everyone with access to pasture has turned cows out or is very close to doing so. The great thing about summer is that it is typically a time where we can sit back, relax and watch cows do what they were designed to do, which is graze.

With this said, don't lose sight of the fact that we are still asking cows to nurse a calf, breed back in time to maintain a 365-day calving interval, need minimal health intervention, and hopefully maintain body condition. Energy balance is vital to these processes and can be grossly compromised in cattle with any level of internal or external parasite burden. This month, in the first of a two-part series on parasite control, I will focus on internal parasites in the cow herd.

Endoparasites, often referred to as internal parasites, are typically classified as either nematodes (roundworms), cestodes (tapeworms), or trematodes (flukes). In the Midwest, tapeworms and flukes are generally not of concern, so I will concentrate my thoughts on roundworm prevention and treatment.

There is little doubt that roundworms can have a significant drag on production. Although few studies have been conducted in recent years, data indicate cows that have been dewormed may have breeding season pregnancy rates that are 10-15 percentage points greater than cows that are not dewormed.

In addition to pregnancy rates, milk production is also compromised in cattle carrying an internal parasite burden. A Minnesota study published in 1997 by Stromberg and colleagues reported more than a 6 lb. difference in peak daily milk production between beef cows that were and were not dewormed at the beginning of the grazing season. Thus, it is no surprise that proper deworming has been shown to routinely improve calf weaning weights.

An analysis conducted by Drs. Lawrence and Ibarbaru at Iowa State University in 2007 highlighted the advantages of deworming. In that analysis they determined that not deworming resulted in a loss of production upwards of \$165 per cow-calf unit, with nearly 70% of that loss attributed to reduced pregnancy rates. In today's dollars, this report would suggest a loss of nearly \$200 per cow-calf unit in operations that do not deworm.

It should also be noted research has demonstrated that economically relevant production losses can occur even when internal parasite levels are less than five eggs per gram of fecal matter. Although fecal sampling is a good management practice to determine effectiveness of parasite management, it should not be assumed that a "low" fecal egg count is not relevant.

Whether using an injectable, drench or pour-on product, be aware that the duration of effectiveness can range from 15-150 days depending on the product you are using. Therefore, operations that have increased exposure to larvae by way of longer grazing seasons or overgrazed pastures may benefit from multiple treatments throughout the year. Alternatively, work closely with your herd health veterinarian to develop a strategically timed treatment protocol that will maximize effectiveness of the product(s) you are using.

As always, to optimize your summer grazing program, consult with the team of experts you have assembled, including your beef extension specialist, nutritionist, and herd health veterinarian.

Western Region

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

Fall-calving herds

The main focus is to keep weaned calves healthy. Cows are on cruise control.

Reproductive management

Pregnancy check. Cows should be pregchecked, and open and problem cows should be culled. Avoid holding over open cows even if they have been excellent producers, as typically the problem will reoccur.

Nutritional management

Body condition. Monitor body condition of cows. The target level of body condition at calving is 5.0 for mature cows and 5.5 to 6.0 for 2-year-old heifers (scale = 1 to 9).

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 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 impact foot and leg soundness. Our target levels of performance from weaning to the time that yearling measurements are collected are 3-3.5 lb. per head per day for bulls and 1.5 lb. per head per day for heifers.

Health management

Weaned calves. Weaned calves should be treated to control any internal or external parasites. We prefer to use a pour-on deworming product as it will knock down the fly populations that start to become a problem at this time of year. Heifer calves should be Bang's vaccinated if not already done, and both bulls and heifers should be PI-BVD tested if that is part of your animal health management program.

Pregnant cows. If late-term abortions have been a problem in the past, consider CONTINUED ON PAGE 52



booster vaccinations for leptospirosis at pregcheck time.

Spring-calving herds

The main focus is breeding season and suckling calf health.

Reproductive management

Breeding season. Depending on desired calving dates, the AI breeding period should be close to being concluded. Monitor return heats for any patterns that may arise in terms of low conception rates with specific sires. Also consider using GnRH injections with repeat inseminations. In addition, be sure that cleanup bulls have been semen- and trich-tested and are ready for use in terms of vaccinations and health, body condition, and foot and leg soundness.

Nutritional management

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.

Many of the companies have mineral mixes that are available that have a higher percentage of chelated minerals. These products are more expensive, but we have had very good results feeding these during the breeding season. Many breeders also have experienced good results using injectable products such as Multimin® prior to the breeding season.

Energy balance. Energy balance has a major impact on fertility and, thus, it is critical that cows are in a state of positive energy balance or gaining weight during the breeding season. June is normally a month when cows will be grazing pastures that are of sufficient quality to maintain cows in positive energy balance without any need for supplementation.

Health management

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. Early summer is typically the time of the year when

we experience the most problems with pneumonia in young calves. Monitor calves closely, and be quick and aggressive with treatment, as young calves will go downhill quickly.

General management

Castrate bottom-end bull calves.

Producers should consider castrating the bottom end of their bull calves at 2 to 3 months of age when they receive their first round of vaccinations. Some producers are reluctant to do this because of the impact that it has on contemporary groups and performance records. However, there is typically more profit in selling a weaned steer calf vs. a cull yearling bull that has accumulated a significant amount of development costs.

Pinkeye prevention. The incidence of pinkeye can be reduced by clipping tall, mature grasses; controlling flies with dust bags, pour-ons, and/or fly tags; and treating problems quickly and aggressively. Our preferred treatment is an injection of approximately 2 cc (mixture of 90% penicillin and 10% dexamethasone) under the membrane that covers the upper portion

of the eye and to then cover the eye with an eye patch.

Mid-South Atlantic Region

by **Kevin Shaffer,** West Virginia University, Kevin.Shaffer@mail.wvu.edu

Spring bull sale season has concluded, and new bull owners are optimistic of the future their new purchases will provide. I share in that optimism and look forward to learning what true value these new sires will transmit. Certainly, some will be disappointments and some will be successes, but at this point, I have to trust the information I was provided until I can evaluate calves. As they say, the proof is in the progeny.

During my search for sires this past winter and spring, I was disappointed by the lack of information provided by many seedstock breeders. Several failed to provide much more than a birth weight, nursing ratio, and minimal EPDs, and while others provided more, it was often incomplete on the entire offering. As I thought about this more, it brought about the question: Are seedstock breeders today truly concerned with

collecting data to evaluate their cattle objectively, or are they more concerned with filling a blank box in order to sell bulls?

As an example, I sorted through several large offerings of bulls (200-500 head), and in some cases 20%-30% did not have yearling ultrasound data because they were too young when scanned. Now, I fully realize that managing large numbers of cows may result in some calves falling outside a desired age range, but many breeders are highly successful in managing very large contemporary groups to generate meaningful data. Why the difference?

- Marketing breeders who lack complete data due to age are more concerned about marketing than breeding and often have a sale date that is too early to coincide with comprehensive data collection. As a bull buyer, this is a major red flag.
- 2. Desire breeders who provide complete data do so because they understand its value to themselves and their customers. They want to do it because it's the right thing to do.

Personally, I am a very selfish breeder. I collect as much performance data as possible

on as many progeny as possible because it helps me! Like I said earlier, the proof is in the progeny. I want to know as much about a sire I am using as soon as I can because it helps me better understand if I want to use him again or not, and if I choose to use him again, how best to utilize him. From making matings to weighing calves, each year is a research project — a cycle of data collection and analysis in an attempt to determine the true genetic merit of sires utilized. It is a time-consuming, expensive and labor-intensive process, but it benefits me and, as a result, my bull customers.

Purchasing yearling bulls is difficult enough when complete information is provided let alone when data is limited. Customers deserve to be informed. The sire selection process is too important and too impactful to go about it blind, but collecting data because some buyers request it is not a valid reason, either. Collect and utilize data because it has value to you as a breeder. Be a breeder, not a box checker.

