Guide to abbreviations and acronyms

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

TOTTOWN	ng appreviations 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
brucell	
	ovine spongiform encephalopathy
BVD	bovine viral diarrhea
Ca	calcium
CHAPS	Cow Herd Analysis and
65	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
GnRH IBR	gonadotropin-releasing hormone infectious bovine rhinotracheitis
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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 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	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 PI 913	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 PI 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 neck 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 neck pregnancy-check selenium
IBR ID IM in. lb. LCT lepto Mg MiG MLV N P PI PI3 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 neck 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 neck pregnancy-check selenium square feet tandardized Performance Analysis
IBR ID IM in. lb. LCT lepto Mg MiG MLV N P PI PI3 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 neck 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 neck 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 neck 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 neck pregnancy-check selenium square feet tandardized Performance Analysis bovine tuberculosis total digestible nutrients

Western Region

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

This month I am going to change the format of my column, and rather than focusing on the details concerning herd management in different areas, I am going to cover a couple topics that are extremely important for any purebred herd.

Business plan. Today, many of our purebred breeders have outside income that covers the losses associated with their purebred cattle operations. Although it has always been part of the business, it bothers me that a higher percentage of our purebred operations are not economically sustainable on their own.

Most of the purebred breeders in our part of the country have historically generated most of their income through the sale of commercial bulls and a limited number of purebred females. The number of commercial cows in our state has declined through the years, and feed costs have driven up development costs on bulls considerably. However, the demand for and average prices of range bulls has been outstanding the last few years in our state. Thus, bull sales have proven to be quite profitable for many purebred producers during this time period.

The marketing of purebred females has been more challenging. This part of the purebred business has almost dried up totally in our part of the country. I don't know all of the causes; however, fewer numbers of new purebred breeders and widespread use of ET are most likely two factors that are involved. Females can always be marketed as commercial females; however, it is hard to justify the added labor and expense associated with purebred cattle if the progeny are going to be sold as commercial cattle.

I think it is extremely important that breeders sit down and really put some time and effort into developing a business plan for their operations that addresses how their operation can be most efficient. It is paramount that breeders really understand how expense dollars are divided up and how income can be maximized.

Marketing plan. The ability to market livestock is critically important in

determining the level of success with any species of purebred livestock. Many areas of management such as reproduction, health or nutrition are equally important, whether you are managing purebred or commercial livestock. However, that is not the case in the area of marketing. In my opinion, many times marketing is the factor that differentiates the really successful vs. average purebred operations. Many times, average producers will have cattle that are just as good from a genetic and phenotypic standpoint; however, they never get to that elite level because they simply don't have the marketing ability to get there.

I am of no help to anybody in this area because my marketing skills are average at best. However, firms are available that are outstanding in helping breeders with the development of advertising and websites. In addition, I would encourage purebred breeders to develop a marketing plan that ensures their advertising dollars are being placed in media that are tailored most closely to their potential clientele, and the timing of those advertisements will reach potential customers at the most opportune time to achieve marketing success.

Midwest Region

by **Twig Marston,** University of Nebraska, tmarston2@unl.edu

Cow herd management

- ▶ Preg-check, weigh and condition score every breeding female.
- ►Cull cows if they fall into one of the four O's — open, old, ornery or oddballs. Oddballs can be caused by a number of reasons; i.e., late vs. early calving; unsound; or unproductive.
- ► Consider feeding cull cows to increase value. Research has indicated that healthy cull cows can dramatically increase in value in as little as 60 days.
- Extremely thin cows may need extra feed to prepare for winter.
- ► Control external and internal parasites when needed.
- ► Check individual ID of cows. Replace lost tags or rebrand.
- ▶ Utilize crop residues. Grazing crop aftermath can reduce forage costs by 50% or more. Use management techniques to optimize grazing efficiency.

► Vaccinate cows according to your veterinarian's recommendations.

Calf management

If October is your weaning month, wean calves using the following guidelines:

- ▶ Reduce stress by providing a clean, dustfree, comfortable environment.
- ▶ Provide a balanced nutritional program to promote weight gain and health.
- Observe feed and water intake. Healthy, problem-free calves have good appetites and drink adequate amounts of water.
- ►Observe calves frequently. Early detection of sickness reduces medical costs and performance losses.
- ► Vaccinate calves according to your veterinarian's recommendations.
- ► Weigh, measure and record all calves individually.
- ▶ Participate in national-level breed association performance [AHIR®/Beef Record Service (BRS)] and recordkeeping programs (AIMS).
- ▶ Select replacement heifers for:
 - Age. Older heifers breed earlier.
 - Daughters of above-average-producing cows.
 - Proper frame size to complement the desired mature size and weight.
 - Structural correctness. Avoid breeding udder, feet and leg problems into your herd.
- ► Develop replacement heifers to reach a target weight of 50%-65% of their mature weight for first breeding.

Southeastern Region

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

Is a controlled breeding season worth it? Part 3: Improving management and marketing strategies

As we head into the fall, the fall-calving herds are in the middle of calving season. Hopefully, for those employing a controlled breeding season, they are reaping the benefits in their forage/nutritional program with soaring feed prices. However, if we change focus, the final part of the discussion on a controlled breeding season is looking at improvement in management and marketing. With input prices high, producers need to work every angle they have to increase the value of their cattle. The improvements in management of both cows and calves and marketing go hand-in-hand, and have the potential to increase the price received for a calf crop.

Cow management. This has essentially been discussed in the previous articles. The improved efficiency in which the nutrition and reproduction programs can be handled in a controlled breeding season can reduce

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costs. Also, it provides an opportunity with marketing cull cows. Open cows are not desirable in a cattle operation, but there is a chance to improve their value. In a controlled breeding season, open cows are identified at one time through pregnancy checking. Therefore, a group of cows, not just one here and there, are available. Through proper Beef Quality Assurance (BQA) practices, these cull cows can bring higher prices and take some of the sting out of dealing with open cows.

Calf management. Producing a highquality calf crop can be labor-intensive. Spreading this labor out through continuous calving may sound like a money saver, but in actuality, it isn't. There are two major management practices that producers can employ to receive considerable premiums. These include utilizing a known health program and keeping records (i.e., age and source verification). Under a controlled breeding season, calves are similar in age. Therefore, the practices associated with a health program (i.e., castration, vaccination, etc.) can be performed on all calves at the same time. This concentrates labor and makes it easier to purchase pharmaceuticals in bulk to reduce costs.

Additionally, one of the major components of age and source verification is verifying the age. This can be done individually or by defining the beginning and end of the calving season. How do you define the beginning and end of a calving season with a continuous breeding season? It is probably safe to assume if a producer is not using a controlled breeding season, he or she is not recording individual birth dates.

Marketing. The buzzword in marketing calves is uniformity. Color, muscle and frame can be controlled through genetics. However, a controlled breeding season will produce a group of calves that are similar in age and weight. A group of calves that can produce a truckload, or be combined with a similar group to do so, will bring more money more often than not. A simple search of prices on an online marketing site and comparing to the average USDA market report will illustrate this point.

During the past three months, we have discussed the benefits of a controlled breeding season. It is rather intimidating in the beginning, considering all of the steps to consider and the time it takes to get there. However, if you break it down and tackle it in chunks, it is feasible for anyone. Also, the economic incentive, considering the potential to decrease production costs and increase the

value of the calf crop, should make this task much easier to handle. For more information or assistance with developing a program to convert to a controlled breeding season, please contact your local extension office.

Southern Great Plains

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

General

Much like last year, producers in the Southern Great Plains will be forced to utilize lower-quality forage resources to maintain cows through the coming winter. Products like cornstalks, milo stalks, and wheat straw will be common feed resources. In addition, much of this year's prairie hay crop was diluted by mature cool-season annual grasses, resulting in lower hay quality.

Consider using hay ammoniation technology on these low-quality forages. The chemical change that occurs during the ammoniation process results in increased crude protein content of about 5 to 8 percentage points and increased energy value of an average of 11 percentage points. Plus, it increases intake by an average of about 20%. That's a truly amazing transformation. The other tremendous benefit this year is that ammoniated hay will require very little, if any, supplementation for gestating cows. Our recent cost estimates suggest that the process will cost about \$25 per ton of hay, give or take. Ammoniating hay is laborious and out of most peoples' comfort zone. However, of the 21 years I have been doing extension work in the beef industry, this is the year to take advantage of this little-used management technique.

For more information refer to the OSU fact sheet available on the ammoniation topic. It is publication number PSS-2243.

Spring-calving herds

- **1.** Wean and individually weigh calves and administer booster vaccinations according to the herd health plan.
- Individually weigh, condition score and preg-check cows and bred heifers. Some herd health programs call for vaccinations at weaning.
- 3. Hopefully, the cow herd was culled early in response to a second year of extreme drought. This is no time to hold open cows hoping they will breed back and fit into a fall-calving herd. Cull females that are open. Our experience in the OSU research herd and other data shows that rolling open cows into the fall-calving herd or keeping them for an entire year results in a very poor success rate: around 50%-60% pregnancy rate in subsequent breeding seasons.
- 4. Report whole-herd records to your breed

association. Few producers report wholeherd individual cow weights and BCS. This information is critically needed as we go forward into a time of extremely high input costs, and the need to improve overall efficiency of beef production.

5. Treat cows and calves for internal and external parasites as recommended by your veterinarian. This is best timed after the first killing frost, although many understandably do this at weaning to save time and labor.

Fall-calving herds

- 1. Evaluate herd bulls for semen quality and purchase new herd bulls using a balanced, multiple-trait selection approach. If possible, ask to see the dams of bulls you are interested in purchasing. Selection for good udder quality and other desirable female characteristics (like moderate mature size and fleshing ability) begins with bull and semen purchases.
- **2.** Closely monitor late-calving heifers for possible calving problems.
- **3.** Purchase herd health products that will be needed for the fall "branding" time herd health program.
- 4. Feed for thought: supplementation philosophy. Fall-calving cows should be in the stage of production referred to as early lactation with the breeding season approaching. They should be in excellent body condition. If they are not in good condition, something is wrong! This is a critical period because extreme or rapid weight loss will result in later pregnancies and more open cows. However, this period also represents an opportunity to challenge your cows from a nutritional perspective.

Let's assume the grazing resource is abundant, low-quality warm-season native range. The cows' environment can be modified in many ways: calve in spring rather than fall, reduce stocking rate, graze wheat pasture, supplement more, etc. You can "modify" their environment by providing large quantities of protein and/or energy supplement to meet their requirements according to the textbooks.

The goal would be to minimize or eliminate cow weight and condition loss. This is difficult and expensive because supplemental energy is partitioned to support maternal tissue only after requirements for maximum genetic potential for milk have been met.

At the other extreme is the low-input philosophy. You can choose to not supplement at all (extreme approach) or provide a small package of protein supplement (moderate approach) and let the cows tell you which ones are the best "fit" for your ranch resources.