

# Story & photos by MICKY WILSON

It's March. Undoubtedly a favorite activity of most cattlemen this time of year — aside from calving — is attending bull sales. But after bringing that bull home, what do you need to do to keep him in tip-top shape?

Three industry experts gave the *Angus Beef Bulletin* their advice about management of weaned bull calves, yearling bulls, and what to do with bulls in the off-season.

Glenn Selk, Oklahoma State University, explained management considerations for bulls in the fifth edition of the Oklahoma Cooperative Extension Service, Division of Agricultural Sciences and Natural Resources, Oklahoma State University Beef Cattle Manual.

Everett Benoit, Benoit Angus, Esbon, Kan., also offered up a few tips about bull management. Benoit Angus registered 379 Angus bulls in 2006.

Duane Robertson, Russellville, Mo., is an affiliate of Professional Bull Genetics, a group of cattle breeders who develop bulls using expected progeny differences (EPDs) and marketing techniques, enabling commercial cattlemen to obtain full profit potential from their bulls.

### **Weaned bull calves**

Failure to provide an adequate diet for weaned bull calves can adversely affect bull growth and development, Selk said. Not only is development delayed, but sexual maturity may not be achieved, resulting in a calf crop that is less than it could have been.

To determine the amount of growth for weaned bulls, Selk said, there are typically 160 days to grow from weaning time to when the bull reaches yearling age. During that time, bulls need to be gaining at least 2.5 pounds (lb.) a day on a moderate-energy diet that includes grain. If bulls are not being gain-tested, Selk recommends a diet amounting to a minimum of 2% of the bull's body weight daily.

Feedgrains need to be started slowly — during at the very least a two-week period — and increased to maintain that 2% body weight ratio as bulls put on the pounds.

Since bulls are growing so rapidly at this point, they need at least 14% crude protein (CP) in their ration, and may require up to 16%-20% protein in their ration mix.

As bulls age and mature, less protein is required, but it still needs to be maintained at a level of 10.5% or slightly more to maintain proper rumen function.

As part of his weaning program, Benoit vaccinates against respiratory diseases three to four weeks prior to weaning. The booster given at weaning is a seven-way vaccine that includes blackleg. The bulls are also dewormed at weaning with ivermectin.

"We hand-feed the bull calves in bunks in smaller pens to get bulls adapted to new surroundings," he adds.

For weaned bulls, Robertson prefers "a low- to moderate-energy diet that allows the expression of growth and carcass traits without overconditioning the bulls. I like to see backfat measurements around 0.15 to 0.30 inches for yearling bulls," he says.

"Of course, we all know that fat sells, so it becomes a balancing act between making the bull highly marketable and protecting his long-term health and soundness," Robertson continues. "Maybe this points out the fact that we still have some educating to do with some folks."

### **Yearling bulls**

Desired characteristics of yearling bulls start with a bull that is well-

grown, but not too fat. If bulls start getting overly conditioned, Selk suggests reducing the amount of energy in the ration. Bulls should be in a body condition score (BCS) of 6 on a scale of 1-9. Additionally, bulls should reach puberty 3-4 months before they are turned out with cows for breeding.

"Any rancher who purchases a young, highly-fitted or conditioned bull should plan to gradually reduce the fleshiness of the bull before the breeding season," Selk said. To do that, he advises feeding bulls 60%-70% of their previous intake, reducing grain 10% per week until the desired level of feed intake is reached.

"The production of semen by a young bull largely depends on his overall growth as well as the development of his testicles and other reproductive organs," Selk adds. "The size of testicles and volume of semen produced are positively correlated."

It's generally 60 to 120 days from a bull's yearling age until breeding, so feed rations should continue to be similar to that of weaned bulls.

"A young bull will use body stores of energy and lose over 100 pounds during the breeding season," Selk said. "This should come from energy stored as fat, or condition, rather than muscle tissue since the bull is still growing. Excessive rapid condition loss lowers the bull's fertility and libido, and should be avoided."

Yearling bulls should only be turned out with cows for 60 days, Selk recommends. They should also be left separate from mature bulls in the offseason until their second winter.

"Yearling bulls off test should be observed when they are first turned



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out with other bulls," Benoit adds, reiterating, "If you run bulls together they should be the same age and should have been together before they were turned out." Additionally, he says, yearling bulls should be able to service 20-25 cows.

Roberts agrees. "I normally recommend giving yearling bulls a break after 60 days and using them on 20-25 females. I think that normally works pretty well, although the number of females could vary quite a bit depending on scrotal size, the bull's breeding practices, flesh condition of the cows, time of year and air temperature, and feed resources."

#### In the off-season

For spring-calving herds, the postbreeding season is about seven months, usually during the fall and winter.

Goals for this period of time, Selk said, are to keep feed costs at a practical minimum, keep bulls in moderate condition, minimize the chance of injuries, and allow for the growth of young bulls.

When bulls are pulled from breeding pastures, Selk advises, appraise each one and sort the bulls into three groups:

- 1. mature bulls in good condition that won't require extra care;
- 2. young, growing bulls that need higher-quality feed; and
- 3. cull, or salvage, bulls.

# Table 1: Example ration for young bulls

Ingredient	Percentage
grass hay, offered free choice	44%
cracked corn	43%
soybean meal	11%
limestone (calcium carbonate)	0.9%
salt	0.35%
vitamin A-30000	0.0122%

One way to manage the feed for young bulls is to offer high-quality grass hay free choice and a concentrate feed at a rate of about 2% of body weight.

Source: Selk.

# Table 2: Example grain mix, in pounds (lb.)

Ingredient	Pounds
corn	1,566
soybean meal (44%)	392
limestone	29
salt	11.5
vitamin A-30000	0.5

The grain mix could be ground and mixed separately. It should be fed at the rate of 2 lb. per 100 lb. of bull body weight.

Source: Selk.

During the off-season, it is very important to supplement bulls with mineral, especially phosphorus (P) and vitamin A. Keeping to the rule of thumb, bulls should be fed 2% of their body weight in dry feed per day to maintain proper condition.

"When bulls are not in use, they need to be away from the cows and in a place they can get plenty of exercise," Benoit adds. "Bulls, when put together, will usually fight somewhat, but in a couple of days they will be buddies."

Benoit also warns bulls may not need grain or extra feed because they can get too big if they are fed too much. "If you can keep the bulls hard and lean they will last longer," he advises.

"It's certainly a good idea to have a pen or small pasture for your herd bulls," Robertson adds. "Probably a few acres or more with feed and water arranged to encourage exercise. Overconditioning mature bulls can be a problem. Bulls function better when kept in moderate flesh, and it's pretty easy to overfeed if you're giving grain to a single individual. Most mature bulls are probably better off with just grass or decent-quality hay."

