

CONTINUED CARE & MANAGEMENT OF EVALUATED BULLS

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Yearling bulls just finishing a bull evaluation require special attention to continue their proper development. Proper care is essential in realizing the full benefit from your investment in genetics.

Start with the Right Diet

Young, tested bulls are fed a moderate-energy diet allowing their genetic potential for growth to be accurately measured. This level of energy nutrition must be adjusted downward following the evaluation to avoid excessive fat production and resulting impaired fertility, yet provide for continued growth and development. Often, between the end of the actual evaluation period, and sale day, this step-down process has already begun. It is a good practice to start bulls on a similar diet to the one which they have become accustomed during the test, but reduce intake 60 to 70 percent. Bulls weighing approximately 1250 lb will consume 25 to 35 pounds of dry matter per day when full-fed a high concentrate diet. The amount of grain fed can be reduced weekly and gradually be replaced with high quality alfalfa, mixed, or grass hay. This step-down should be completed by bull-turnout. Generally, from sale day, until the start of the breeding season, yearling bulls should be targeted to gain 2.0 to 2.5 lb per day. Diets should contain a minimum of 12% crude protein during this time. If bulls have not been receiving 6 to 8 lb of grain per day, any grain addition to the diet should be started gradually to avoid digestive disorders including founder and acidosis. Example rations are shown in Table 1.

Provide adequate clean water, and a complete, free choice, mineral/vitamin mix (not simply TM salt). Bulls should begin the breeding season in a body condition score of 6 (1 to 9 scale; 1=thin, 9=obese).

Selecting a Development Area

Exercise is an important factor to keep in mind when selecting a place to house bulls before the breeding season. Provide an area that will allow bulls to stay physically active. This will pay dividends during the breeding season when bulls need to be sexually active. This is a good time to comingle new bulls for a period of time before turnout, if they will be in the same breeding pastures. Make sure the area is free of obstacles that could cause injury.

Table 1. Example diets for yearling bulls

	DM, lb	As-fed, lb
Example 1		
Whole shelled corn	11	12.5
Dried distiller's grains	5.25	6.0
Good quality grass hay	4.0	4.5
(or good grass pasture)	(4.0)	(13.5)
Limestone	1.0	1.0
Mineral/vitamin mix	0.25	0.25
Example 2		
Corn silage	8	23
Whole shelled corn	11	12.5
Protein suppl. (e.g. DGS, 40% suppl.)	2	2
Limestone	0.1	0.1
Mineral/vitamin mix	0.25	0.25

Breeding Soundness Exam

Annually, before the breeding season, all bulls should receive a breeding soundness exam (BSE) to reduce the risk of relying on an infertile bull. Bull infertility is not uncommon and can be economically devastating, especially in single-bull breeding pastures.

Breeding Season Management

The breeding season should be kept to a maximum of 60 days for young bulls to prevent excessive weight loss. It is not unusual for young bulls to lose 100 lb or more during their first breeding season. Monitor body condition closely, and do not allow your young bull to become thin (less than body condition score 4). Young bulls that become too thin may have impaired development and reduced lifetime productivity.

Young bulls can normally be expected to breed the number of females equal to their age in months (*i.e.* 18-month-old bull could service 18 females). Bulls used together in multiple-sire pastures should always be of similar age and size. Rotating bulls among breeding pastures, or use of older bulls early in the breeding season are ways to reduce the breeding pressure on young bulls. All bulls should be monitored closely for breeding behavior and libido, and potential lameness or injury. Also observe females for estrus. More than the expected number of returned estrous cycles should be a prompt alert to possible bull infertility.

Management after the Breeding Season

In addition to gaining back weight lost during the breeding season, young bulls need to have their energy demands met for continued growth. Depending on their post-breeding weight and body condition, generally, young bulls should gain about 2.0 lb per day during the 10-month rest period to reach a target of 75% of their potential mature weight by 2 years of age. This can normally be attained by feeding 8 to 12 lb of grain, in addition to a full feed of pasture or hay. A total full-fed diet should contain about 10 to 11% crude protein; therefore, supplemental protein may be necessary if forage quality is low. Again, a complete mineral/vitamin mix should be provided. Young bulls should be maintained separately from mature bulls so that feeding competition does not limit their nutrient intake. Also, provide shelter from extreme cold weather that may cause frostbite of the scrotum and impaired future fertility.

Go to <http://msue.anr.msu.edu/experts> to find an area MSU Extension Educator for more information on beef management.

Reference

Buskirk, D., G. Hill, H. Ritchie, and D. Nielsen. 2002. Upper Midwest beef cow mineral-vitamin nutrition. Ext. Bull. E-2810. Michigan State University, East Lansing. <http://web2.msue.msu.edu/bulletins/Bulletin/PDF/E2810.pdf>

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