Replacement cow scoring

An overview of frame, muscle and body condition scores on replacement cows

Contact: David J. Patterson Division of Animal Sciences. University of Missouri

Frame score

The frame size is calculated by estimating what the heifer will weigh as a mature cow when carrying 0.2" of backfat at the 12th rib with an average gut fill.

Each grade is divided into tenths, with a tenth equal to 20 lbs. Thus, a Medium 0 will weigh 900 lbs., a Medium 50 will weigh 1,000 lbs. and a Medium 100 will weigh 1,100 lbs. and so forth. Somewhat different is the Large 100 which indicates those females will weigh more than 1,300 lbs. when mature.



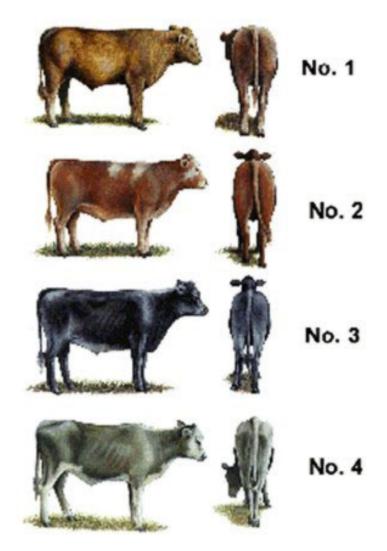
USDA frame	Mature weight (lbs.)
Large	1,100-1,300+
Medium	900-1,100
Small	700-900

Show-Me Select heifers are graded by certified MDA/USDA graders and must meet the minimum requirements of a Medium 0 which is 900 lbs. mature weight with 0.2" of backfat at the 12th rib.

Muscle score

The muscle thickness is based on the kind of calf the cow would be expected to produce when bred to a bull of the same inherent muscular characteristics. There are 4 different muscle scores: 1, 2, 3, and 4. A 1 correlates to a thicker muscled animal with 4 being the thinnest muscle. Each score is broken into tenths, similar to the frame score, with a 1-100 being the thickest and a 1-10 almost a number 2 muscle.

Replacement cow scoring



Show-Me Select heifers must meet a minimum muscle score of a 2-0 applied by certified MDA/USDA graders based off of the USDA Feeder Cattle Standards.

Body condition score

A body condition score (BCS) basically describes the degree of fatness of an animal. A numerical range of 1 to 9 identifies varying degrees of fat cover. Live weight, because of varying gut fills and pregnancy status, is not a determining factor for body condition. In other words, animals of similar weights may differ dramatically in BCS. A score is given based on fat cover in the brisket, on the ribs, back, hooks and pins, and around the tail head. The optimum range for BCS is 5 through 7.

BCS Description

- 1. Severely emaciated. Little evidence of fat deposits or muscling.
- 2. Emaciated. Little evidence of fat but some muscle in hindquarters.
- 3. Very thin. No fat on ribs or brisket. Backbone easily visible.

Page 2 of 3

Replacement cow scoring

- 4. Thin, with ribs easily visible but shoulders and hindquarters still showing fair muscling. Backbone visible.
- 5. Moderate to thin. Last two or three ribs cannot be seen unless animal has been shrunk. Little evidence of fat in brisket, over ribs, or around tailhead.
- 6. Good, smooth appearance; some fat deposits in brisket and over tailhead. Ribs covered and back appears rounded.
- 7. Very good flesh, brisket full. Ribs very smooth.
- 8. Obese, back very square, heavy fat pockets around tailhead. Square appearance.
- 9. Rarely observed. Very obese. Mobility may be impaired by excessive fat.

Show-Me Select heifers bred to calve in the spring must weigh a minimum of 800 lbs. and receive a minimum BCS of 5 if selling in the Fall/Winter sales.

Page 3 of 3