

BREEDING BEEF CATTLE: JUDGING OUTLINE

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FUNCTION

The function of breeding cattle is complex since they must:

- Reproduce regularly over a long period of time
- Have the vitality to maintain themselves in thrifty condition mainly on forages
- Produce calves and/or yearlings that have enough weight and quality to be profitable when sold

PEDIGREE

In the selection of purebred breeding cattle, pedigrees should be considered since they will assist in:

- Detecting genetic defects
- Identifying outstanding bloodlines
- Planning the mating and breeding programs

PERFORMANCE

Individual performance and the performance of progeny (EPDs) and close relatives should be obtained and evaluated and utilized in the following areas:

- Reproductive performance
- Growth rate and efficiency
- Carcass merit (quantity and quality)

VISUAL APPRAISAL - JUDGING

The following characteristics should be visually appraised (eye-balled) and then combined with pedigree analysis and performance records in order to do the most effective job in determining which animals stay in the breeding herd (selection) and/or which sire will be mated to which dams.

SIZE (FRAME) AND SHAPE (CONFORMATION)

BULLS - Minimum weight of 400 pounds at weaning and 700 pounds at 12 months. Growth rate and efficiency from birth to 1,200 pounds is most important. Composition (% muscle - % fat - % bone) is important at 1,000-1,300 pounds. Percent muscle should be maximized. A minimum mature weight of 1,500-2,000 pounds is recommended since mature weight is correlated with preslaughter growth rate. Birth weights should be checked to assure ease of calving. Birth weights in excess of 90 pounds and/or very thick muscling and heavy bone, may create calving difficulties. Adequate depth and width of body is essential for efficient rapid growth.

COWS AND HEIFERS - Under most conditions, medium size (900 to 1,250 pounds at calf weaning time) mature cows are usually the most efficient economical producers. Small (less than 900 pounds mature weight at calf weaning time) cows have less salvage value, usually produce calves with less growth potential, and have less total maintenance requirements. Very large cows have high maintenance requirements and are sometimes inefficient in reproduction and calf production.

MUSCLING

BULLS - Long thick muscling is desired. It is indicated by the length and size (thickness, circumference) of the major muscles in the fore-

arm and gaskin, fullness and bulge of muscle in the stifle area above the rear flank, and the length, thickness and bulge of muscle in the round and down the top. Very thick, short, rounded extreme muscling in the shoulder and round, which hinders locomotion, gives "double muscled" appearance, and usually causes (dystocia), is not desired.

FEMALES - Long, smooth, moderate thickness of muscling is desired. Short, thick, bunchy muscling is usually a disadvantage, as it may be related to light milk production and reproductive inefficiencies.

FINISH (FLESHING ABILITY)

The degree of finish varies depending on nutrient levels, parasites, season of year, genotype and sex of the animal. Bulls should be trim with a thin even distribution of fat and not show excessive wasty deposits of fat, even when on high nutritive levels, or during the nonbreeding seasons. It may be detrimental to excessively fatten heifers or cows as they deposit excessive fatty tissue in their udder and around their reproductive organs, which may result in decreased milk production and inefficient reproductive rates. Females will normally deposit more fat in the brisket, along the underline and over the ribs and back, than bulls. Cows and bulls in good flesh (fleshy but not fat), winter cheaper and more efficiently than those who are poor doers and have little fleshing ability.

STRUCTURAL SOUNDNESS

Correct set of feet and legs is necessary for cattle to travel and remain sound during a long productive life. Uneven, small, curled or twisted toes, and crooked feet usually result in lameness and should be discriminated against. Postlegged, extreme knock-kneed, splay-footed, sickledhocked and long-weak pasterns are all conditions which may result in un-

soundness and therefore, should be considered faults. Straight shoulders and short straight pasterns are not desired. Free, easy, sound movement is desired as compared to that which is short, stiff, uncoordinated or ponderous.

SEX CHARACTERISTICS

BULLS - Mature bulls should show masculinity with a burly masculine head (coarse hair and heavy jaw); a crest over the neck; heavy muscling in response to the hormone testosterone which stimulates nitrogen retention; medium length legs as the result of male hormones stopping growth of long bones; scrotum and testes well balanced and of adequate size in relation to age; tight clean sheath; and adequate libido. Bulls with Brahman (*Bos Indicus*) breeding will have more dewlap and sheath. Pendulous sheaths with protruding prepuce and/or penis are objectionable.

COWS AND HEIFERS - Should be feminine with refined heads; long, narrow, clean necks; angular body shape with smooth shoulders and adequate body capacity. Size and placement of vulva is important. Strong udder attachments with small to medium size teats suspended from an adequate size udder with a level floor are essential.

BREED CHARACTERISTICS

In purebreds, the traits that distinguish one breed from another, are hair color or hair color patterns; head shape; ear size, shape and carriage; amount of dewlap, sheath or naval skin; polled or horned; and overall body shape. Emphasis should be in relation to economic value and their relationship to efficient beef production.

