



#### WHITE PAPER CATTLE TERMS AND DEFINITIONS

# <u>A</u>

**ARTIFICIAL INSEMINATION (AI)**: The technique of placing semen from the male into the reproductive tract of the female by means other than natural service.

### B

**BIRTH WEIGHT (BW):** The weight of a calf taken within 24 hours after birth. Heavy birth weights tend to be correlated with calving problems.

**BOS INDICUS**: A subspecies of cattle of south Asian origin. Often known as Zebu, they have prominent humps forward of the shoulder. The Brahman breed is one example.

**BOS TAURUS**: A subspecies of cattle of middle and northern Europe origin but often referred to as 'European' or 'British' breeds.

**BOVINE:** The scientific name for cattle.

BRAND: A permanent mark applied to an animal by hot-iron or freeze branding.

BRANDING IRON: The tool used to apply a brand.

**BREED**: A group of cattle that have the same external characteristics and that pass these traits on to each generation.

**BREEDER**: The owner of the parents of a calf at the time of mating.

BREEDERS: A reference to productive females in a herd.

**BULL:** A sexually mature male bovine.

С

**CAESAREAN SECTION**: A procedure in which a calf is surgically removed from the cow, by making a large incision in the left side of the cow, just above the flank.

**CALF:** A young animal that is suckling/running with its mother (heifers can begin cycling at 7-8 months of age).

**CALVING DIFFICULTY**: Abnormal or difficult labour, the two most important known causes of calving difficulty in heifers are excessive calf size at birth and inadequate size of the birth canal.

**CALVING EASE**: An easy calving is one that does not require assistance and does not impose undue strain on the calf or dam.

**CARCASS EVALUATION**: Techniques for measuring components of quality and quantity in carcasses and using the information for genetic prediction of carcass merit.

**CARCASS MERIT**: Desirability of a carcass relative to quantity of components (muscle, fat, and bone) and potential eating quality.

**CASTRATE**: To remove the testes from male cattle.

**COMPOSITE BREED**: A breed made up of combinations of other breeds.

**COW**: A sexually mature female bovine that has had one or more calves.

**CROSSBRED**: The progeny from the mating of different breeds of cattle.

**CROSSBREEDING**: The mating of animals of different breeds.

**CULLING**: The process of eliminating animals from a herd that are less productive or have less desirable features.

**CUTABILITY**: An estimate of the percentage of saleable meat (muscle) from a carcass versus percentage of waste fat.

# D

**DAM**: The cow that is the mother of a particular calf.





# E

**EMBRYO TRANSFER**: Removing fertilized ova (embryos) from one cow (the donor) and placing these embryos into other cows (the recipients).

**ESTIMATED BREEDING VALUE (EBV)**: An animal's breeding value is its genetic merit, half of which will be passed on to its progeny. While we will never know the exact breeding value, for performance traits it is possible to make good estimates. These estimates are called Estimated Breeding Values (EBVs).

#### <u>F</u>

**FEED CONVERSION (FEED EFFICIENCY)**: Units of feed consumed per unit of weight gained. **FRAME SCORE**: A score based on subjective evaluation or actual measurement of hip height or in the case of Square Meaters cattle measured at the shoulder.

# <u>G</u>

**GESTATION**: The period of pregnancy from conception until young are born, averaging about 285 days in cattle.

#### <u>H</u>

HEIFER: A female bovine less than three years of age that has never had a calf.

#### Ī

**INBREEDING**: The mating together of very closely related animals i.e. a parent with a son or daughter.

# L

LACTATION: The period of a calf nursing between birth and weaning.

**LIBIDO**: Sex drive and the desire to mate on the part of the male.

**LINEBREEDING**: A system of inbreeding of animals not as closely related (as is done with inbreeding) in which an attempt is made to concentrate the inheritance of some favoured ancestor in descendants within a herd.

#### M

**MARBLING**: The specks of fat (intramuscular fat) distributed in muscular tissue.

**MATERNAL SIRES**: Are those sires whose major function is to sire daughters with exceptional genetic merit for reproductive and maternal qualities.

#### <u>N</u>

**NATURAL SERVICE**: When a bull is run with a group of females and physically serves them.

#### <u>0</u>

**OUTBREEDING (OUTCROSSING)**: Is a system of mating together animals from within the same breed that are not closely related. It is usually used when introducing new blood lines to increase the genetic pool in a herd.

# <u>P</u>

**PEDIGREE**: The tracing of names or lineage of an individual animal's ancestors.

**POLLED**: A naturally hornless animal having no horns or scurs.

**PREPOTENCY**: The ability of a parent to transmit its characteristics to its offspring so that they resemble that parent.

**PREPUCE**: The foreskin, a retractable fold of skin covering the tip of the penis.

**PROGENY:** The young, or offspring, of the parents.

**PUREBRED**: An animal of traceable ancestry within a recognized breed that is eligible for registry in the official herd book of that breed.





### <u>R</u>

**REGISTERED**: An animal whose name is recorded in the stud record books (herd book) of its breed association. The sire and dam must also be recorded.

**RIB EYE AREA (EMA)**: Is the area of the surface of the longissimus muscle at the ribbing site and is calculated in Square Centimeters. EMA may be measured at the 10th, 11th, 12th or 13th rib and are measured manually using a plastic grid.

### <u>S</u>

**SCURS**: Horny tissue that are attached to the skin rather than the bony parts of the head.

**SCROTAL CIRCUMFERENCE:** The measurement of testes size obtained by measuring the distance around the testicles in the scrotum.

**SEEDSTOCK BREEDERS**: Are livestock producers whose primary goal is to produce breeding stock with optimum genetic merit and traits that will increase downstream profit of commercial beef production.

**SELECTION**: The Choosing of various individuals for traits of interest as parents of the next generation of offspring.

SIRE: A male parent (bull) of a particular calf.

STEER: A castrated/neutered male (usually done at an early age).

**STAG**: A male animal that has not been correctly castrated or may have a testicle retained in its abdomen (never dropped down) and showing male characteristics.

**SUPER OVULATION:** This is the method by which a cow is treated with reproductive hormones to induce her to produce more eggs than normal as part of an embryo program.

# T

**TATTOOING:** Is a means of identification for stud animals. A permanent unique Prefix and Individual identification number is placed in one or both ears depending on the breed societies requirements. This is carried out by applying permanent ink and using pliers designed for the purpose.

**TEMPERAMENT**: A gauge of the relative docility of an animal in relation to their ease of handling.

**TERMINAL SIRES**: Terminal sires have the genetics for higher weight gains and larger weaning weights but all the progeny both male and female are breed for slaughter and not retained for breeding purposes. Terminal sires are used for more masculine qualities (i.e., muscling) than maternal sires (milking ability, mothering ability, calving ease, etc.).

#### <u>W</u>

WEAN: To separate a calf from its mother.

#### <u>Y</u>

YEARLING: Heifer steer or bull between one and two years old.

**YIELD**: The amount of saleable meat on a carcase (after the bone, excess fat and offal has been removed).