

Abattoir	A slaughterhouse.
ADED	Agriculture Data Element Dictionary.
ADIS	Agriculture Data Interchange Syntax.
Adjusted traits	Traits adjusted to facilitate more meaningful comparisons such as 365 day weights or eye muscle area adjusted to constant weight or age.
Ad-libitum feeding	Feeding to appetite.
Age at puberty	The age at which an individual becomes physiologically capable of sexual reproduction.
Alleles	Alternate forms of genes. Because genes occur in pairs in body cells, one gene of a pair may have one effect and another gene of that same pair (allele) may have a different effect on the same trait.
Allelic frequencies	The frequency with which a particular allele appears among the possible alleles in a population.
Animal Breeding	The practical application of genetic analysis for development of lines of domestic animals suited to human purposes.
Animal ID	The unique identification of an animal.
Anus area	The surface area of an animal observed from the rear of an animal, the area under the tail, around the anus.
Artificial insemination	The technique of placing semen from the male into the reproductive tract of the female by means other than natural service.
ASCII	American Standard Code for Information Interchange.
ASCII file	American Standard Code for Information Interchange, is a character set (256 characters) and a character encoding based on the Roman alphabet as used in modern English. ASCII codes represent text in computers, in other communications equipment, and in control devices that work with text.
Assay	An assay is a procedure where a property of a system or object is measured.
Average daily weight gain	The total live weight increase between two weight recordings, divided by the number of days between the two weighing records.
Average days to calving	The number of days from when bull has access to breeding females to calving when natural mating exposure is practiced during a breeding season.
Average lifetime calving interval	The number of days between first and last calving divided by the number of lifetime calvings (days).
Base Population	A group of animals with unknown parents in genetic evaluations, whose EBV's are set to zero, or other group of animals with EBV's set to zero (e.g. those born in a particular year).
Beef recording scheme	A system of recording data within a beef cattle population with regard to beef traits.
Behavioral trait	Behavioral traits are traits, such as docility, which describe the way in which an animal behaves, with regard to humans, other animals and during specific activities such as calving or feeding.

Beta-agonist	A bronchodilator medicine that opens the airways by relaxing the muscles around the airways.
Birth weight	The weight of a calf taken within 24 hours after birth.
BLAD	Bovine Leukocyte Adhesion Deficiency.
Body Condition Scoring	A scoring procedure which describes the state of fleshing of the animal.
Breed	Animals with a common origin and selection history. Animals within a breed have characteristics that distinguish them from other breeds or groups of animals within that same species.
Breeding farms	Farms which specialize in the production of animals to be used as sires and dams on other farms which rear animals for animal producing animal products.
Breeding population	A group of organisms of the same species relatively isolated from other groups of the same species.
Breeding value	The transmissible genetic merit of an individual, or the value of that individual as a parent.
Bullock	Castrated male.
Calculated or Derived traits	Traits derived from recorded traits such as food conversion efficiency.
Calving difficulty (Dystocia)	Abnormal or difficult labor, causing difficulty in delivering the fetus and/or placenta.
Calving ease score	A numerical score quantifying calving ease, ranging from an easy, unassisted calving through to an abnormal presentation.
Calving to first oestrus postpartum interval	The time in days it takes for a cow to reach its first oestrous after giving birth.
Carcass composition	The proportions of a connective tissue, bone, muscle and fat in a carcass.
Carcass grade	The relative level of the a carcass for certain aspects, such as fatness, colour, maturity and class (e.g. male, female, young, old).
Carcass weight	In the case of no legal definition, carcass weight should be defined as the hot weight of both half carcasses after being bled and eviscerated and after removal of skin, removal of external genitalia, the limbs at the carpus and tarsus, head, tail, kidneys and kidney fats and the udder.
Central test	A comparison conducted at a single location where animals are assembled from several herds to evaluate differences in performance traits under uniform management conditions.
Chilling temperature	As a general rule, chilling temperature is the temperature (10°C) which beef should not fall below within 10 hours of slaughter. If these time/temperature conditions are observed, rigor mortis will advance sufficiently to avoid toughening the meat.
Clone	Any organism whose genetic information is identical to that of a "mother organism" from which it was created.
Code of practice	The minimum requirements that have to be met in each case to achieve a certain accreditation.
Code set	A set of codes or abbreviations to describe a characteristic

	such as E,U,R,O,P for carcass conformation.
Coefficient of variation	The coefficient of variation is the standard deviation divided by the mean. It is a unit less quantity indicating the variability around the mean in relation to the size of the mean.
Complex traits	Complex traits are traits that are affected by many genes and pathways.
Conception rate	Conception rate is the proportion of cows bred in a herd or in a progeny group, which conceived or were pregnant at a defined stage of gestation (day or interval) or which calved (calving rate).
Confiscation	Seize or remove by authority.
Congenital	A condition that was acquired during prenatal life and therefore exists at or dates from birth. The term is often used in the context of defects present at birth.
Contemporary group	A contemporary group may comprise of animals of the same breed, sex and age range kept under the same or at least similar management conditions.
Daily gain	Rate of gain per day in a defined period.
Data dictionary	ISO 11788-2 dictionary for cattle.
Data elements (DDI)	Unique and clear definition of each item and code set appearing in the Data Dictionary.
Data structure	The hierarchy of different types of data and the general format in which the data should be recorded and stored.
Database	A collection of information that has been systematically organized for easy access and analysis.
Derived trait	A recorded trait that has been standardized for a given effect such as age or for environmental factors.
Diploid zygote	A single diploid cell resulting from the fusion of male and female gametes at fertilization (sperm and ovum).
DNA (Deoxyribonucleic acid)	The chemical compound that stores, within each cell, genetic information unique to an individual.
DNA genotyping	The use of the genetic information to establish or confirm the pedigree of an animal.
Dressing percentage	Dressing percentage describes the percent ratio between carcass weight and the live weight taken immediately before slaughter.
Dual identification	The identification of an animal, using visual and other forms of identification such as electronic.
Dual Purpose Breed	Cattle breed exhibiting beef and dairy characteristics.
Dystocia	See calving difficulty
EDI	International Electronic data interchange protocol
Electrical stimulation	A slaughter technique which prevents cold-shortening. It involves transmitting pulses of electric current through carcasses in the early post-slaughter period. These pulses cause a very rapid fall in pH which accelerates rigor mortis so that cooling can commence without the danger of cold-shortening.
EMA	Eye Muscle Area.
Embryo transfer	Removing fertilized ova (embryos) from one cow (the donor),

	generally in response to hormone-induced superovulation, and placing these embryos into other cows (the recipients).
Embryotomy	The cutting of the fetus while in the uterus to aid its removal when delivery is impossible by natural means.
Empty weights	Anima weight when it consumes no feed or water for minimum 12 hours prior to weighing.
Entities	Data objects, that are composed of a set of data elements (items and code sets), describe the contents and the structure of records that are transmitted according to ADIS rules.
Entity tables	Tables of data objects.
Environmental effects	Effects which influence the performance of an animal which are not genetic in origin.
EPD	Expected Progeny Difference.
Estimated Breeding Value (EBV)	A measure of an animal's genetic merit for a given trait.
E-U-R-O-P	EU carcass conformation system.
Eye Muscle Area	Cross sectional area of the longissimus dorsi muscle. It is usually is measured between the 12th -13th ribs of the ribbed carcass.
Feed Efficiency	The ratio of nutrient input to beef output.
Feed intake	The amount of feed consumed by an animal.
Female breeding index	The number of matings per conception or per gestation or per calving.
Female reproductive performance	Refers to a females capacity to produce developing embryos and also to her capacity to give birth to a live calf and to ensure a proper postnatal maternal environment for normal calf growth.
Finishing Farm	The farm or facility where an animal completes its growing and finishing phase before slaughter.
Fixed and random effects	When a sample exhausts the population, the corresponding variable is fixed; when the sample is a small (i.e., negligible) part of the population the corresponding variable is random.
Founder animal	The earliest know ancestor of an animal.
Functional longevity	Longevity corrected for performance. Culling for low productivity is disregarded since performance is used as a different selection criterion. Only culling for health problems or other non-production causes is taken into account.
Gametes	Mature germ cells.
Gene interactions	The collaboration of several different genes in the production of one phenotypic character.
Gene introgression	Introduction of a single gene to an existing breed by crossing to a new breed, and then backcrossing to the original breed for several generations.
Generation interval	Average age of parents when the offspring destined to replace them are born. It should be computed separately for male and female parents.
Genetic defects	A genetic defect is a disease or disorder that is inherited genetically.
Genetic evaluation	The prediction of breeding values.

Genetic proofs	The breeding value of an animal as determined by a recognised genetic evaluation procedure.
Genetic variance	The portion of phenotypic variance resulting from the presence of different genotypes in the population.
Genetic groups	Groups of animals with unknown parents. Groups are formed according to age (year born), country of origin and/or breed composition (if more than one breed is included).
Genetic markers	A genetic marker is an allele, DNA marker or cytogenetic marker used as a probe to keep track of an individual, a tissue, a cell, a nucleus, a chromosome, or a gene.
Genotype	The two alleles present at a locus in an individual. For a locus with only two alleles, three genotypes are possible. For example, at the polled/horned locus in cattle, two common alleles are P (the dominant allele preventing growth of horns) and p (the recessive allele allowing horn growth). The three possible genotypes are PP (homozygous dominant), Pp (heterozygous or carrier), and pp (homozygous recessive).
Gestation length	The number of days between known conception date and subsequent calving date.
Growth promoting implants	Chemicals that lead to increased muscle accretion in ruminants.
Health traits	Traits that relate to the health of an animal.
Heat (oestrous) synchronization	Causing a group of cows or heifers to initiate oestrous cycles at approximately the same time through hormonal manipulation.
Heterosis (hybrid vigor)	Amount by which the average performance for a trait in crossbred calves exceeds the average performance of the two or more purebreds that were mated in that particular cross.
ICAR	International Committee for Animal Recording.
Indicator traits	Traits that do not have direct economic importance, but aid in the prediction of economically important traits.
INGO	International non-governmental organisation.
International Agreement of Recording Practice	The title of the ICAR animal recording rules.
Intramuscular fat	Intramuscular fat (marbling) is the intermingling or dispersion of fat within the lean.
Invariant data	Data that is constant, such as an animals date of birth.
ISO	International Organization for Standardization.
Lactation	The period of calf nursing between birth and weaning.
Lean Meat	Meat with the connective tissue limits, but free of visible fat.
Libido	Sex drive. In bulls, the propensity to detect and mate estrous females.
Life history	Life history refers to the full cycle of an animal's reproductive and productive herd life.
Linear scoring	The visual assessment of an animal for one or more morphological characteristics using a linear scale which represents the biological extremes in the population of animals under consideration.
Link Sire	A sire with descendents in two or more contemporary groups.

Live finish weights	Live weight collected at time of harvest or slaughter.
Live weight gain	The weight gained between two weight measurements during an animals life divided by time between the measurements in units (e.g. days).
Locus	The specific location of a gene on a chromosome.
Longevity	Duration of life.
Maintenance energy requirement	The amount of feed energy required per day by an animal to maintain its body weight and support necessary metabolic functions.
Management group	Group of animals managed together.
Marbling	The specks of fat (intramuscular fat) distributed in muscular tissue. Marbling is usually evaluated in the rib eye between the 12th and 13th rib.
Marker Assisted Selection (MAS)	The use of genetic markers to select for specific alleles at linked QTLs and therefore specific traits.
Mating ability	Physical ability of a bull to complete a service.
Maturity	An estimation of the physiological age of the animal or carcass.
Mean	The average value of a set of numbers.
Measured traits	The trait recorded on the animal.
Meat quality	Refers to palatability, appearance, nutritional value and food safety.
Meat yield	The percentage of lean meat in the beef carcass as obtained by dissection.
Metabolic body size	The weight of the animal raised to the 3/4 power ($W^{0.75}$); a value indicative of the feed required to meet metabolic needs and maintain current body weight.
Metritis	Inflammation of the womb.
Microsatellites	A region of the genome where the same sequence of base pairs is repeated several times, end to end.
Mitosis	The process in cell division by which the nucleus divides, typically in four stages (prophase, metaphase, anaphase, and telophase) resulting in two new nuclei, each of which has exactly the same chromosome and DNA content as the original cell.
Multiple Ovulation and Egg Transfer (MOET)	A series of reproductive techniques including superovulation of a donor female, mating, recovery of the resulting embryos, and transfer of fresh or frozen embryos to recipient females.
Muscle Depth	The ultrasonic measurement of eye muscle depth.
Net Feed Efficiency (NFE)	Refers to the difference in animals feed intake independent of requirements for growth rate and body weight.
Net Feed Intake (NFI)	The trait calculated by phenotypic adjustment of feed intake for body weight and growth as a measure of NFE.
Nominal classification	Occurs where observations are recorded in discrete, unordered classes, like breed or reason for disposal.
Non-genetic effects	Effects which influence the performance of an animal which are not genetic in origin.
Non-return rate	Based on the observation that a bred/mated cow has not returned for another service within a defined number of days.

Oestrus	Period of sexual receptivity.
OIE	International Office of Epizooties.
Oocytes	Immature ova.
Ordinal scale	A number which defines a thing (trait) in a standard scale.
Organogenesis	The production of organ systems during animal embryogenesis.
Ovulation	Release of the female germ cell (egg or ovum) by the ovary. Cows usually ovulate several hours (up to 15 hours) after the end of estrus or standing heat.
Ovum Pick Up technique (OPU)	Collection of eggs from donors through an ultrasonically guided needle inserted into the ovary.
Parentage testing	The exclusion of relationship when an animal has a genotype inconsistent to a putative relationship.
Parturition	The act of giving birth.
Pedigree	A tabulation of names of an individual's ancestors, usually only those of the three to five closest generations. Pedigree information is used to establish genetic relationships among individuals to use in genetic evaluations.
Peer-to-peer system	(P2P) Computer network that relies on the computing power and bandwidth of the participants in the network rather than concentrating it on a relatively few number of servers.
Performance data	The record of the individual animal for reproduction, production, or carcass merit.
Performance testing	The systematic collection of comparative production information on an individual.
Performance traits	An alternative term used to describe recorded traits.
pH	Degree of acidity or alkalinity.
Phenotype	The set of observable characteristics of an animal.
Polygenic	A trait controlled by many genes and their interactions.
Polymorphism	The existence of two or more alleles at a gene locus in a population.
Postpartum	After the birth of an individual.
Postpartum interval	The number of days between parturition and the first postpartum oestrus.
Post-weaning growth	Growth from weaning to yearling.
Predictor trait	A trait that can be measured easily on an animal and which is highly correlated to a relevant production trait. An example is scrotal circumference in the case of male fertility.
Prewaning gain	Weight gained between birth and weaning.
Primiparous	Female giving birth for first time.
Productive herd life	The period of time between the start of production and the end of productive life.
Progeny	The young, or offspring, of the parents.
Progeny Test	The evaluation procedure of an animal based on the performance of its progeny.
Puberty	The age at which the reproductive organs become functionally operative and secondary sex characteristics begin to develop.
QTL	Quantitative trait loci, a locus affecting the phenotypic

	variation in continuously varying traits like skin color, weight, etc.
Quality assurance	Standardised methods to assure a defined level of quality.
Recorded trait	Traits actually recorded on the animal.
Relative economic value	The amount by which net income to the cattle enterprise will change, per unit change in genetic merit for a trait.
Reproductive status	Describes the standing of the animal in respect of its breeding cycle/status.
Rib eye area	Area of the longissimus muscle measured at the 12th rib interface on the beef forequarter.
Rib Fat Thickness	The thickness of fat measured at a location on the live animal using ultrasound. A common site assessed in a number of countries is located $\frac{3}{4}$ of the distance from the medial to the dorsal end of the longissimus dorsi at a lateral point between the 12th and 13th rib.
Room temperature	Room temperature, in laboratory reports, is taken to be roughly 21–23 degrees Celsius (70–73 degrees Fahrenheit), or 294–296 kelvins. The "standard" room temperature is 22 °C (72 °F or 295 K).
Rump fat thickness or P8 scan	An indicator of fatness and can be used to improve the overall accuracy of external fat measurements, measured using ultrasound.
Scrotal circumference	A measure of testes size obtained by measuring the distance around the testicles in the scrotum with a circular tape. Related to semen producing capacity and age at puberty of female sibs and progeny.
Selection	Choosing some individuals and rejecting others as parents of the next generation of offspring.
Selection differential	The difference between the average for a trait in selected cattle and the average for that same trait of the group from which they came. The expected response to selection for a trait is equal to selection differential times the heritability of the trait.
Selection intensity	The selection differential measured in phenotypic standard deviation units of the selected trait. It is inversely proportional to the proportion of available replacements actually selected to be parents of the next generation.
Sensory taste panel	A trained sensory taste panel is skilled in scoring specific attributes of eating quality, independently of other sensory dimensions.
Sex limited traits	Traits, such as milk production, that are expressed in only one sex.
Shrunk weight	Weight after fasting for a defined length of time.
SNP markers	These are a single nucleotide polymorphisms located throughout the genome.
SQL converter programm	(Commonly expanded to Structured Query Language) is the most popular computer language used to create, modify and retrieve data from relational database management systems.
Standard deviation	Standard deviation is a statistical measure of spread or variability.

Stayability	Refers to the ability of a breeding animal to remain in the breeding herd.
Steer	Castrated male.
Subjective score	Classifies animals, using a finite ordinal scale, into one of a number of possible classes.
The longissimus dorsi	Forms the eye of meat seen when chops and steaks are cut from the posterior rib region and loin.
Threshold model	Statistical procedure for analyzing traits that are expressed in an all-or-none fashion (e.g. alive versus dead) but that probably are affected by environmental factors and by genes at many loci. When genetic predictions are conducted for such traits using the threshold model, resultant estimated breeding values reflect the expected proportion of an individual's progeny that will versus will not express the trait.
Trait code	A standard abbreviation used to represent a trait such as WW for weaning weight.
Ultrasonic measurements	A non-invasive method used to estimate carcass characteristics and reproductive events. It operates off the principle that sound waves echo differently with different densities of tissue.
UN/EDIFACT	International EDI standard developed under the United Nations. The acronym stands for United Nations/Electronic Data Interchange For Administration, Commerce, and Transport.
Vacuum package	Vacuum packaging refers to packaging in containers (rigid or flexible), from which substantially all air has been removed prior to final sealing of the container.
Warner-Bratzler shear force	An measure of meat tenderness.
Weaning weight	Weight collected at the time the calf is weaned.
Weight per day of age	Weight of an individual divided by its age in days.
XML	Standard internet data interchange protocol.
Yearling weight	Live weight at 365 days of age.