



**Anestrus** - the interval of sexual inactivity between two periods of heat

**Balling gun** - Instrument used to administer pills into an animal's throat

**Bang's disease** - see brucellosis

**Beef** - meat from cattle (bovine species) other than calves. Meat from calves is called veal

**Beta-casein** - a subset of milk protein which has two common variants A1 and A2 (see [Genetic Tests for Milk](#) article in the Milk education tab)

**Bloat** - abnormal condition characterized by a distention of the rumen, usually seen on the left side, due to an accumulation of gases

**Bos indicus** - Zebu (humped) cattle including the Brahman breed in the United States

**Bos Taurus** - includes most cattle in the U.S. and their European ancestors. Dexters are of the *Bos taurus* species

**Bovine** - refers to a general family grouping of cattle (which also includes buffaloes and bison)

**Bovine Viral Diarrhea (BVD)** - viral disease in cattle that can cause diarrhea, lesions of the digestive tract, repeat breeding, abortion, mummification, and congenital defects.

**Bred** - female has been mated to a bull and is assumed to be pregnant

**Breech** - any birthing position that is not correct and normal

**Breeding Soundness Exam (BSE)** - evaluation of the reproductive potential of a bull. For more information, see the article in Vets Corner titled [Semen Testing Bulls](#)

**Brucellosis** - a contagious bacterial disease that results in abortion. Also called Bang's disease. See the article in Vets Corner '[What is "Bangs" Vaccine?](#)' for additional information

**Bull** - an intact bovine male (not castrated)

**Bulldog** - a dead, malformed fetus resulting from the fetus inheriting the chondrodysplasia gene from both parents. The term "bulldog calf" was coined because of their "bulldog" appearance.

**Bulling** - term used to describe a cow or heifer in estrus ("in heat"). The term is derived from the mounting behavior of cows that are in heat.

**Bullock** - a young bull, typically less than 20 months of age

**Calf** - young male or female bovine less than 1 year of age

**Calve** - giving birth to a calf. Same as parturition

**Carcass** - the body of a slaughtered animal after removal of the offal

**Castrate** - to remove the testicles, thus rendering a bull infertile

**Cervix** - portion of the female reproductive system between the vagina and uterus

**Chondrodysplasia** - a form of dwarfism caused by a dominant gene. A Dexter with one chondrodysplasia gene is called a carrier. Carriers are typically shorter than non carriers. A fetus that inherits two chondrodysplasia genes will not live. These highly affected calves are called bulldog calves because of their "bulldog" appearance.

**Chromosome** - Chromosomes are thread-like bodies that carry genes on them. Chromosomes come in connected pairs: one chromosome is inherited from the father and the other from the mother. Humans have 23 pairs of chromosomes that carry all of the inherited information in the human body. Cattle have 30 pairs.

**Closed herd** - herd in which no outside breeding stock is introduced.

**Cod** - scrotal area of a steer that remains after castration.

# Dexter Dictionary

**Colostrum** - first milk given from a cow after having a calf. It is high in antibodies, giving the calf protection against invading microorganisms. See the full article in Vets Corner: [`Getting Calves Off to a Good Start`](#)

**Conformation** - physical form of an animal; its shape and arrangement of parts

**Congenital** - acquired during prenatal life. Condition exists at birth. Often used in the context of congenital birth defects.

**Corpus luteum** - a yellowish body in the ovary. The cells which were follicular cells develop into the corpus luteum which secretes progesterone, which is essential for pregnancy. It prevents cows from returning to heat and tells the uterus to prepare for a fertilized egg.

**Cow** - a sexually mature female bovine which has usually produced a calf

**Cow hocked** - condition in which the hocks are close together and the feet stand apart

**Cryptorchidism** - retention of one or both testicles in the abdominal cavity

**Cud** - food which cattle regurgitate for further chewing. Cows must chew food twice in order to digest it properly

**Cull** - to eliminate one or more animals from the breeding herd, usually due to inferior genetic qualities or because the animal is no longer productive

**Cycling** - infers that non pregnant females are having estrous cycle

**Dam** - female parent

**DNA** - deoxyribonucleic acid. Genes are specific packages of DNA that code for specific characteristics and conditions

**Dewclaws** - hard, horny protrusions above the hoof on the rear surface of the legs

**Dewlap** - loose skin under the chin and neck of cattle

**Dominant Gene** - A gene that is always expressed in an animal's phenotype. Dominant genes do not allow recessive genes to be expressed, thus masking their presence in a gene pair

**Drench** - to give fluids by mouth

**Dry (cow)** - refers to a non-lactating female

**Dystocia** - abnormal or difficult labor, causing difficulty in delivering the calf

**Embryo** - fertilized egg in early stages of development. After body parts can be distinguished it is known as a fetus

**Embryo Transfer (ET)** - transfer of fertilized eggs from a donor cow to one or more recipient cows

**Estrus** - period of mating activity in a cow or heifer. Same as heat.

**Femininity** - well developed secondary female sexual characteristics, udder development and refinement in head and neck.

**Fertility** - capacity to initiate, sustain and support reproduction.

**Fetus** - late stage of individual development within the uterus. Generally the individual is regarded as an embryo in the 1<sup>st</sup> half of development and a fetus during the last half.

**Finish** - (1) degree of fatness of an animal (2) completion of the last feeding phase of slaughter animals

**Fitting** - proper feeding, grooming and handling of an animal, usually to prepare it for the show ring.

**Follicle** - blister-like fluid filled structure in the ovary that contains the egg.

**Follicle Stimulating Hormone (FSH)** - hormone produced and released by the anterior pituitary that stimulates development of the follicle in the ovary

# Dexter Dictionary

**Freemartin** - female twin born with a bull twin. Freemartins are most often sterile. Many labs now offer a test, using a blood sample, to test the female for the freemartin condition.

**Freshen** - Cows "freshen" after a calf's birth. Freshening occurs when the milk production begins.

**Gene** - segment of DNA in the chromosome that codes for a trait and determines how a trait will develop

**Genome** - total number of genes in a species

**Genotype** - A genotype is a unique "genetic fingerprint" of a Dexter. The genetic material for genotyping is harvested from the roots of an animal's tail hairs. The breeder pulls hairs from the Dexter's switch and mails those hairs to an ADCA approved lab. The lab processes some of the hair roots, translating specific genetic information into numerical markers.

**Gestation** - time from conception to when a female gives birth

**Gonad** - testes of a male, ovary of a female

**Hanging weight** - weight of a slaughtered animal after the head, skin, hooves and non-usable organs are removed

**Heart girth** - circumference of the animal's body measured just behind the shoulders

**Heat** - Same as estrus - the period of time when the cow's or heifer's ovary is releasing an egg and she is receptive to mating with the bull

**Heifer** - young female bovine prior to the time she produces her first calf

**Heredity** - the transmission of genetic material from parents to their offspring. The inherited genetic material determines each animal's particular traits

**Heterosis** - the increase in growth, size, fertility, function, yield, or other characters in hybrids over those of their purebred parents. Also called "hybrid vigor."

**Heterozygous** - the two genes in a gene pair are not alike: two different alleles

**Hiplock** - condition at calving in which the hips of the calf cannot pass through the pelvis of the cow

**Homozygous** - the two genes in a gene pair are alike: two identical alleles

**Immunity** - ability of an animal to resist or overcome infection

**Inbreeding** - the mating of first degree relatives, such as father-daughter, mother-son, or brother-sister. Inbreeding tends to increase the number of individuals that are homozygous for a trait, and also typically increases the appearance of recessive traits

**Insemination** - deposition of semen into the female genital tract

**Intensive grazing** - grazing management where a grazing unit is sub divided into subunits (paddocks) with grazing periods typically less than 5 days

**Lactation** - secretion and production of milk

**Lethal gene** - a gene that causes the death of an individual at some stage of life

**Legume** - any plant within the family of Leguminosae, such as pea, bean, alfalfa, and clover

**Lice** - small, flat, wingless insects with sucking mouth parts that are parasitic on the skin of animals

**Linebreeding** - breeding related individuals (not as closely related as first degree relatives) to concentrate the genetic contribution of a given individual within a herd. This can produce a certain "line" of animals that are fairly consistent in form and function when adopted as a long-term strategy with appropriate selection

**Live weight** - the weight of an animal before slaughter

**Locus** - position on a chromosome where a gene is located

## Dexter Dictionary

**Luteinizing Hormone (LH)** - protein hormone produced and released by the anterior pituitary that stimulates the formation and retention of the corpus luteum. It also initiates ovulation.

**Mammary gland** - gland that secretes milk

**Marbling** - flecks of fat distributed in muscle tissue. Usually evaluated in the rib eye between the 12<sup>th</sup> and 13<sup>th</sup> ribs

**Masculinity** - Well developed secondary sex characteristics in the neck, chest and shoulders of a bull

**Mastitis** - infection of the mammary gland that produces inflammation, redness, and off-color milk

**Maternal traits** - All the traits expressed by the cow

**Melengestrol acetate (MGA)** - Feed additive that suppresses estrus in heifers

**Metritis** - inflammation (infection) of the uterus

**Mites** - very small arachnids that can be parasites on cattle

**Muzzle** - nose of cattle

**Natural beef** - refers to beef from cattle that have not been fed growth stimulants or antibiotics

**Offal** - all organs and tissues removed from the inside of an animal during the slaughtering process

**Open** - refers to nonpregnant females

**Outbreeding** - process of continuously mating females of the herd to unrelated males of the same breed

**Ova** - plural of ovum, meaning eggs

**Ovary** - female reproductive organ in which the eggs are formed and progesterone and estrogenic hormones are produced

**Ovulation** - shedding or release of the egg from the follicle of the ovary

**Ovum** - egg produced by a female

**Palatability** - degree to which food (e.g. beef) is acceptable to the taste or sufficiently acceptable in flavor tenderness and juiciness to be eaten

**Palpation** - feeling by hand

**Parasite** - organism that lives a part of its lifecycle in or on, and at the expense of, another organism

**Parentage Verification** - the process of comparing a calf's genotype to the genotype of its sire and dam. This comparison studies whether a calf's genetic material appropriately matches that of its parents so that the parentage can be verified. All three animals must have their genotypes completed and compared as a trio at the same lab for this verification to be properly done.

**Parturition** - the process of giving birth.

**Paternal** - refers to sire or bull

**Pathogen** - biologic agent (e.g., bacteria, virus, protozoa, nematode) that may produce disease or illness

**Pedigree** - records of the ancestry of an animal: an animal's "family tree"

**Phenotype** - characteristics of an animal that can be seen and/or measured

**Pink eye (Infectious Bovine Keratoconjunctivitis)** - a highly contagious infectious bacterial disease of the eye caused by *Moraxella bovis*

**Pituitary** - small endocrine gland located at the base of the brain

**Placenta** - membranes that form around the embryo and attach to the uterus. Afterbirth

**Polled** - naturally and genetically without horns

# Dexter Dictionary

**Postpartum** - the period after birth

**Prenatal** - prior to being born. Before birth

**Prepotent** - ability of a parent to transmit their characteristics to offspring so that they resemble the parent or each other more than usual

**Progeny** - offspring of the parents

**Progesterone** - hormone produced by the corpus luteum that stimulates progestational proliferation in the uterus of the female

**Prolapse** - abnormal protrusion of part of an organ, such as the uterus, vagina or rectum in cattle. Uterine prolapse is most common at calving. Quick treatment is necessary. Call your vet!

**Prostaglandins** - chemical mediators that control many biochemical and physiological functions in the body. One prostaglandin, PGF<sub>2</sub>, can be used to synchronize estrus

**PHA (Pulmonary Hypoplasia with Anasarca)** - a lethal recessive disorder. Affected calves have small poorly formed lungs and excessive fluid and are born dead

**Puberty** - age at which reproductive organs become functionally operative

**Purebred** - animal eligible for registry with a recognized breed association

**Recessive Gene** - a gene that is only expressed in an animal's phenotype if a dominant gene is not present. Both genes in the gene pair must be the recessive gene for that gene to be expressed.

**Replacement heifers** - heifers usually between 6 months and 16 months of age that have been selected to replace cows in a breeding herd

**Retained placenta** - fetal membranes (afterbirth) not expelled through the reproductive tract in the normal length of time following calving

**Roughage** - feed that is high in fiber, low in digestible nutrients, and low in energy (e.g., hay, straw, silage, and pasture)

**Rumen** - compartment of the ruminant stomach that is similar to a large fermentation pouch where bacteria and protozoa break down fibrous plant material swallowed by the animal. Sometimes referred to as the paunch

**Ruminant** - mammal whose stomach has 4 parts – rumen, reticulum, omasum, and abomasum. Cattle, sheep, goats, deer, and elk are ruminants.

**Rumination** - regurgitation of undigested food that is chewed and then swallowed again. See cud.

**Scours** - diarrhea; profuse watery discharge from the intestines

**Scrotal circumference** - measure of testes size obtained by measuring the distance around the testicles in the scrotum with a circular tape. Related to the bull's semen producing capacity and age at puberty of his daughters

**Scrotum** - pouch that contains the testicles

**Scurs** - growths of horn-like tissue attached to the skin of dehorned or polled animals

**Seedstock** - breeding animals. Sometimes used interchangeably with purebred

**Semen** - fluid containing sperm produced by the male

**Seminal vesicles** - accessory sex glands of the male that provide a portion of the fluid of the semen

**Service** - to breed or mate

**Settle** - to become pregnant

**Shipping fever** - widespread respiratory disease of cattle

**Short yearling** - animal over 1 year of age but less than 18 months

## Dexter Dictionary

**Shrink** - loss of weight. Commonly used in the loss of liveweight when animals are marketed

**Sibling** - brother or sister

**Sickle hocked** - hocks that have too much set, causing the hind feet to be too far forward and too far under the animal

**Silage** - forage, corn fodder, or sorghum preserved by fermentation that produces acids similar to the acids used to make pickled foods for people

**Sire** - male parent

**Soundness** - degree of freedom from injury or defect

**Sperm** - a mature male germ cell

**Splay footed** - toeing out

**Stanchion** - framework consisting of 1 or 2 vertical bars used to secure an animal in a stall or at a trough

**Standing heat** - a cow stands while other animals mount her

**Steer** - male bovine made infertile through castration

**Sterile** - inability to produce offspring

**Stifle** - joint in the hind leg between the femur and tibia

**Stifled** - injury to the stifle joint

**Stillborn** - offspring born dead without ever breathing

**Subcutaneous** - situated beneath or occurring beneath the skin. A subcutaneous injection is an injection made under the skin

**Switch** - tuft or long hair at the end of the tail

**Tail set** - where the head of the tail sets in relation to the pin bones, ideally slightly above and neatly between the pin bones

**Teat** - protuberance of the udder through which milk flows: nipple

**Testicle** - male sex gland that produces sperm and testosterone

**Testosterone** - male sex hormone that stimulates accessory sex glands, causes the male sex drive, and results in the development of masculine characteristics

**Toeing in** - toes of front feet turn in, also called pigeon toed

**Toeing out** - toes of the front feet turn out, also called splay footed

**Top line** - the total length of the animal, from the front of the poll to the back of the rump.

**Total digestive nutrients (TDN)** - sum of digestible protein, fiber, carbohydrate and fat components of feed

**Trichomoniasis** - a venereal disease caused by a protozoa. The disease is characterized by early pregnancy loss, abortion and uterine infections

**Tripe** - edible product from the stomach walls of a ruminant

**Type** - (1) physical conformation of an animal (2) all physical attributes that contribute to the value of an animal for a specific purpose

**Udder** - encased group of mammary glands of the female

**Umbilical cord** - cord through which arteries and veins travel from the fetus to and from the placenta, respectively. This cord is broken when the young are born (it does not need to be cut as with human babies)

**Unsoundness** - any defect or injury that interferes with the vitality, health, and usefulness of an animal

## Dexter Dictionary

**Uterus** - that portion of the female reproductive tract where the young develop during pregnancy.

**Vaccination** - the act of administering a vaccine or antigens

**Vaccine** - suspension of attenuated or killed microbes or toxins administered to induce active immunity

**Vagina** - copulative organ of a female reproductive tract. The vestibule portion also serves for passage of urine during urination. The vagina also serves as the canal through which young pass when born

**Veal** - meat from cattle typically under 3 months of age

**Virus** - ultra-microscopic bundle of genetic material capable of multiplying only in living cells. Viruses cause a wide range of diseases

**Viscera** - internal organs and glands contained in the abdominal and thoracic cavities

**Vulva** - external genitalia of a female mammal

**Water baby** - a dead, malformed fetus resulting from a genetic disorder called PHA. The delivery may be difficult because of excess fluid causing large size putting the cow at risk

**Wean** - separating young animals from their dams so that offspring can no longer suckle

**Yearling** - animals that are approximately 1 year old.

**Yield** - dressing percentage. Percentage of the live animal weight that becomes the carcass weight at slaughter