Texas 4-H

BEEF

Quiz Bowl Sample Questions

Questions are provided for practice only and do not reflect the resources currently used in the contest.
Question: What is the primary purpose of overhead restraints in a single file chute?

Answer: To prevent cattle from rearing up, turning around or falling over backwards.

Question: What is the approximate live age range of a carcass with a maturity level of A?

Answer: 9-30 months

Question: How many days are show steers normally on feed?

Answer: 270 days

Question: What is the definition of Net Worth?

Answer: The difference in 1) Things you own (assets), and (2) amounts you owe (liabilities)
**Avoiding Calving Problems**

**Question:** Excess amounts of what major nutrient during gestation can cause dystocia in cattle?

**Answer:** Protein

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**Beef Performance Glossary**

**Question:** What is Dystocia?

**Answer:** Abnormal or difficult labor, causing difficulty in delivering the fetus and/or placenta.

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**Cattle types and Breed Characteristics and uses**

**Question:** What is the basic classification for the non-humped cattle?

**Answer:** Bos taurus are non-humped cattle.

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**Breeding Soundness of Bulls**

**Question:** What is the function of the bull's epididymis?

**Answer:** Storage, maturation and transportation of sperm cells

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**Adapted Grasses for Texas Pasture**

**Question:** Name two varieties of Love grass.
**Answer:** Common weeping, ermelo, morpa, and renner.

**Question:** What is one advantage to "Direct Sales" as a way to market livestock?

**Answer:** Sellers can merchandise their own animals, exercise independence, encourages innovation in marketing and (possibly) lower selling cost per head.

**Question:** What part of the female reproductive tract is the fetus located in during most of the gestation period?

**Answer:** Uterine horn

**Question:** Dilation of the cervix begins on the internal extremity of the cervix and continues toward the external extremity over a period of how many hours?

**Answer:** 6 to 12 hours.

**Question:** When rectally palpating a cow, what is an indication of rectal damage?

**Answer:** a sandpaper or gritty feel.
**Question:** The condition in which the uterus is filled with white blood cells attempting to clear up disease organisms is called what?

**Answer:** Pyometra

**Question:** To ensure high pregnancy rates, the lowest body condition score that a cow should have is what?

**Answer:** Five (5)

**Question:** Where on a beef animal is fat-thickness measured for the Yield Grade formula?

**Answer:** Over the rib-eye muscle at the 12th rib.

**Question:** Where did the Bos taurus cattle originate?

**Answer:** Bos taurus originated in the British Isles and Western Continental Europe.

**Question:** What is the basic classification of the humped or Zebu Cattle?
**Answer:** Bos indicus are humped cattle.

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**Question:** In a situation where a producer is managing to have all cows calved within the same season, how long should a producer keep his bull, or bulls, with his cows?

**Answer:** 90 Days

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**Question:** What does "fleshing" mean?

**Answer:** Fleshing ability is the body's capacity to fatten and retain fat.

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**Question:** What digestive problem in cattle is the result of excessive breakdown of readily available carbohydrates?

**Answer:** Acidosis

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**Question:** What are the two factors on which beef quality grading is based?

**Answer:** Degree of marbling and degree of maturity
**Question:** What is one major factor that influences birth weight in cattle?

**Answer:** Sex of calf, nutrition level of the dam during gestation, or the genetic influence of the sire.

**Question:** When is the proper stage to harvest forages?

**Answer:** The proper stage for harvesting forages is when the most total digestible nutrients per acre is available.

**Question:** The greatest possible loss to quality in hay production occurs when?

**Answer:** The harvesting of forage is delayed from the optimum stage of development.

**Question:** What three major factors influence birth weights?

**Answer:** Sex of the calf (bull calves are heavier), nutrition level of the dam during gestation, and the genetic influence on birth weight by the sire.

**Question:** Name the abnormal condition in ruminants caused by an accumulation of gas?
**Answer:** Bloat

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**Released April 16, 2009**

**Question:** In stocker cattle, how many pounds will a single implant increase weight gain during the grazing season?

**Answer:** 15 - 40 pounds

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**Released April 16, 2009**

**Question:** The Continental Breeds of cattle were developed on what continent?

**Answer:** Europe

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**Released April 16, 2009**

**Question:** Define cattle breed.

**Answer:** A beef cattle breed can be described as animals of common origin with certain distinguishing characteristics passed uniformly from parent to offspring.

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**Released April 16, 2009**

**Question:** Why is determining pregnancy in cattle an important management tool?

**Answer:** It allows the producer to make timely culling decisions. It tells a producer when calves are expected and he/she can then plan for necessary feeding and labor at calving.
**Question:** The base weight in the yield grade equation is how many pounds?

**Answer:** 600

**Question:** What are three of the four indicators of physiological maturity used in beef carcasses?

**Answer:** Bone indicators ossification of cartilage, color of ribeye muscle and texture of ribeye muscle.

**Question:** What do the seminiferous tubules produce?

**Answer:** Sperm

**Question:** What is meant by a dual purpose cattle breed?

**Answer:** It is a breed selected for both beef and dairy.

**Question:** What are three functions to consider when selecting breeding beef cattle?
**Answer:** Reproduce regularly over a long period of time, Have the vitality to maintain themselves and produce calves and/or yearlings that will be profitable.

**Released April 16, 2009**

**Question:** What is the external portion of the female bovine reproductive tract?

**Answer:** Vulva

**Released April 16, 2009**

**Question:** Name one negative effect of growth implants in bull calves intended for future herd sires.

**Answer:** Suppression of testicular development, reduction of libido and reduction of semen quality.

**Released April 16, 2009**

**Question:** Name one of two types of dehorning instruments that are used on small calves.

**Answer:** Spoon dehorner, tube dehorner

**Released April 16, 2009**

**Question:** When fire branding what causes scalding and blotting?

**Answer:** Wet hide and hair
**Question:** What will high levels of salt in a mineral supplement do to the consumption of the supplement?

**Answer:** Decrease consumption

**Question:** There are three main stages in a young calf's life: ovum, embryo and fetus. Which of these stages begins when the layers of the developing egg begin to enfold?

**Answer:** Embryo

**Question:** In a cow's reproductive tract at the end of each oviduct is a thin cup-like membrane. The purpose of this membrane is to catch ovum or eggs after ovulation. What is the name of this thin cup-like membrane?

**Answer:** Infundibulum

**Question:** Which Bluestem variety has the highest yield and quality potential?

**Answer:** Pretoria 90
**Question:** Name the three stages that take place during the calving process.

**Answer:** Preparatory stage, delivery stage, and membrane expulsion stage.

**Released April 16, 2009**

**Question:** What is the definition of "crowding area?"

**Answer:** A specialized holding pen which funnels cattle into the working or loading chutes.

**Released April 16, 2009**

**Question:** What is the average length of the bovine estrous cycle?

**Answer:** 21 days

**Released April 16, 2009**

**Question:** What is the main function of the hormone progesterone?

**Answer:** Maintain Pregnancy

**Released April 16, 2009**

**Question:** Name three Bermuda grass varieties that must be established from vegetative material

**Answer:** Costal, Brazos, Jiggs, Tifton - 85 and Tifton-44. (Hybrids)
**Question:** Forage maturity indicates the quality of the hay to be produced. What time of year will the highest quality hay be produced?

**Answer:** During the spring and the fall.

**Question:** What is one function of the epididymis?

**Answer:** Concentration, storage, maturation, and transportation of sperm

**Question:** The target body condition score for a cow prior to calving is what?

**Answer:** 5 to 6

**Question:** What vitamin is generally considered to be adequately provided for cattle as long as the cattle are exposed to sunlight?

**Answer:** Vitamin D

**Question:** A chuck comes from what area on the carcass?
Answer: Shoulder

**Question:** Between pasture and range which is typically larger in acreage?

**Answer:** Range

**Question:** This disease causes mineral deposits in the urinary tract, which may cause blockage.

**Answer:** Urinary Calculi

**Question:** Define what Beef Improvement Federation (BIF) Frame Scores are.

**Answer:** Methods of estimating skeletal size based on hip height.

**Question:** How many compartments make up a cow's stomach?

**Answer:** Four
Question: Bacteria, Viruses, and Fungi are all categories of microorganisms which pose potential health threats to cattle. To which of these categories can we attribute Ringworm in cattle?

Answer: Fungi

Question: The first dose of a killed vaccine is called what?

Answer: priming or sensitizing dose

Question: At about 38 days into gestation the placental membranes begin to attach to the uterine wall. This Cotyledon/Caruncle junction is collectively known as what?

Answer: Placetome or button

Question: Name the two possible active ingredients in stocker cattle growth implants used in addition to those that may be found in calf growth implants.

Answer: Estradiol and trenbolone acetate (testosterone is also acceptable)

Question: How many days does the corpus luteum take to completely regress?
**Answer:** 16-17 days

**Released April 16, 2009**

**Question:** Which of the tissues of the testicle produces sperm?

**Answer:** Semeniferous tubules

**Released April 16, 2009**

**Question:** What carcass abnormality occurs when cattle are exposed to Beef Stress Syndrome prior to slaughter?

**Answer:** Dark Cutters or dark colored lean

**Released April 16, 2009**

**Question:** What are two of the three primary reasons for constructing a corral and working facility?

**Answer:** Observe cattle close by, preform routine health functions and improve labor efficiency.

**Released April 16, 2009**

**Question:** What is one disadvantage of auction markets?

**Answer:** No seller input in pricing, selling cost per head may be higher, encourages multiple handling, discourages market innovation.
**Question:** Vibriosis in females can cause what?

**Answer:** Endometritis (infection of inner lining of the uterus), resulting in failure to conceive and death of the embryo.

**Question:** What is milking potential?

**Answer:** Milking potential is the genetic capability to produce milk.

**Question:** Which two minerals do cattle have the greatest requirement for?

**Answer:** Calcium and Phosphorus

**Question:** What does Brucellosis in cattle cause?

**Answer:** It causes abortion and infertility in cattle.

**Question:** Name two things a Breeding Soundness Evaluation includes?
Answer: Physical examination, an internal and external examination of the reproductive tract (2), and semen evaluation

**Released April 16, 2009**

**Resource:** Value Added Calf (VAC) - Vaccination Management Program  
**Page:** 3  
**Code:** 2379

**Question:** What is the maximum amount of vaccine that should be injected in any one injection site?

**Answer:** 10 cc.

**Released April 16, 2009**

**Resource:** Beef Cattle Leader Guide AS 3-1.025  
**Page:** 172  
**Code:** 4139

**Question:** When an inspector discovers something wrong in a carcass, how is it handled?

**Answer:** Immediately isolated and tagged US Retained

**Released April 16, 2009**

**Resource:** Reproductive Diseases in Cattle L-5223  
**Page:** 2  
**Code:** 2278

**Question:** How do you treat the female for Trichomoniasis?

**Answer:** Treat any uterine infection and provide sexual rest for 90 days, also vaccination is an option in cows.

**Released April 16, 2009**

**Resource:** Dehorning, Castrating, and Branding BCM-34  
**Page:** 2  
**Code:** 2367

**Question:** Tube dehorners are used on calves up to what age?

**Answer:** 4 months
Question: From the inside out name the parts of the female reproductive tract.

Answer: infundibulum, oviduct, uterus, cervix, vagina and vulva

Question: What digestive problem in cattle occurs when fermentation gases are produced faster than they can be disposed of?

Answer: Bloat

Question: What organ of the bull’s reproductive system is responsible for concentration, storage, maturation and transportation of sperm cells?

Answer: Epididymis

Question: Occasionally a calf has trouble breathing after delivery, in such instances it is important to quickly clear the mouth and nose of mucus, if the calf continues to have difficulty breathing what is the next step?

Answer: Pick the calf up by the hind legs and swing him back and forth to dislodge the mucus.
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>At what age do most heifers reach puberty?</td>
<td>14-20 months</td>
</tr>
<tr>
<td>What is one mineral that is an antagonist to copper?</td>
<td>Iron, sulfur, or Molybdenum</td>
</tr>
<tr>
<td>What is the length of time (in days) from fertilization to birth of a calf?</td>
<td>~280 Days</td>
</tr>
<tr>
<td>Name two reasons freeze branding will not replace fire branding.</td>
<td>(1) There is no immediate identification, (2) it is not accepted as legal identification in some states, (3) amount of equipment needed, (4) often unpredictable.</td>
</tr>
<tr>
<td>Which part of a grass plant is more digestible?</td>
<td>Leaves</td>
</tr>
</tbody>
</table>
**Released April 16, 2009**


**Question:** What age would you call a fetus if it was five to six inches in length?

**Answer:** 90 days

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**Released April 16, 2009**


**Question:** What is the formula for simple interest?

**Answer:** Principal X Rate X Time

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**Released April 16, 2009**


**Question:** What is the minimum body condition score cow-calf producers should have their cows in at calving for high pregnancy rates?

**Answer:** BCS 5

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**Released April 16, 2009**


**Question:** Which Meat Inspection Act provided for compulsory inspection?

**Answer:** Meat Inspection Act of 1906

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**Released April 16, 2009**


**Question:** What is a digestive ailment often caused by cattle eating rations too high in grain?
**Answer:** Acidosis

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**Released April 16, 2009**

**Resource:** Managing for High Quality Hay L-5219  
**Page:**  
**Code:** 2286

**Question:** List three occurrences that could potentially lower hay quality.

**Answer:** Cutting forages past the optimum stage of maturity, rain leaching soluble nutrients out of the cut forages before bailing has occurred, plant tissue respiration, leaf shattering occurring from over drying.

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**Released April 16, 2009**

**Resource:** Mineral Supplementation of Beef Cows in Texas B-6056  
**Page:** 2  
**Code:** 4002

**Question:** Which mineral does Simmental, Maine Anjou, Limousin, and Charolais cattle have a higher requirement than Angus cattle for?

**Answer:** Copper

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**Released April 16, 2009**

**Resource:** Determining Pregnancy in Cattle B-1077  
**Page:** 6  
**Code:** 2345

**Question:** If a cow is mated during estrus, the sperm cells will travel from the site of deposition to the site of fertilization. In natural service where is the site of fertilization?

**Answer:** The Oviduct

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**Released April 16, 2009**

**Resource:** Frame Score and Weight of Cattle L-5176  
**Page:**  
**Code:** 2055

**Question:** Beef Improvement Federation Frame scores are a method of estimating skeletal size and are based on?

**Answer:** Hip height, weight and age.
**Question:** What is the purpose of the vaccination program?

*Answer:* To raise the level of resistance to viruses and other pathogens before a disease challenge occurs.

**Question:** Which tissue of the testicle produces testosterone?

*Answer:* Leydig cells or interstitial tissue

**Question:** Intermingling or dispersing of fat within the lean is the definition of what?

*Answer:* Marbling

**Question:** The scrotum supports and encloses the testes of the bull. It's main function is to do what for the bull?

*Answer:* regulate testicular temperature
**Question:** In removal of the fetal membranes from a cow either by antibiotic treatments or manually, which method has the lowest conception rate at the first rebreeeing?

**Answer:** Manual removal

**Question:** What units of measurement are used when injecting vaccines?

**Answer:** Milliliters or CC's

**Question:** Size and shape of bones are indicators of what caracteristic of a carcass?

**Answer:** Maturity

**Question:** How many stages is the bovine gestation period divided into?

**Answer:** Three

**Question:** When the moisture level drops below 40 percent, what occurs on the cellular level to the cut forage?

**Answer:** Cell activity will stop.
**Question:** What are three advantages of auction markets?

**Answer:** Convenience, Fast selling, ready market, weighing and selling are regulated and uniform and freedom as to when, where and what to sell.

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**Question:** What three benefits does a properly designed vaccination program provide?

**Answer:** Reduce medicine costs, lower death losses, and enhance production efficiency.

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**Question:** What book written by Upton Sinclair had a major impact on the packing plant industry?

**Answer:** The Jungle

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**Question:** Why is there a limited use of growth implants in replacement heifer calves?

**Answer:** Concern of future reproductive performance
Question: Long term inbreeding reduces performance especially in fertility and survival. What is this effect called?

Answer: Inbreeding depression

Question: What is the yield grade of a carcass with a 54% Boneless Closely Trimmed Retail Cuts?

Answer: 1

Question: Which unit of measurement is used when reporting the Iron requirements of cattle?

Answer: PPM or Parts per million

Question: List three major factors affecting hay quality.

Answer: Maturity at harvest, soil fertility, nutritional status of the plant, available moisture, season of year, ratio of leaves to stems, stem size, weeds/foreign matter, weather at time of harvest, and storage.

Question: What is one method to raise Body Condition Score of thin cattle?
Answer: Raise nutrition through supplemental feeding.

Released April 16, 2009

Question: List the three factors essential for successful overseeding of Gulfrye Grass?

Answer: Removal of summer grass, scarification of the soil, and high levels of fertilization.

Released April 16, 2009

Question: In a grazing situation, how much dry forage will a cow consume in a day?

Answer: 20-30 pounds

Released April 16, 2009

Question: When determining carcass maturity, where does ossification become complete?

Answer: Thoracic region

Released April 16, 2009

Question: Most reproductive failures in the beef female can be attributed to what?

Answer: Improper nutrition and thin body condition.
**Question:** How is Vibriosis spread in a cow herd?

**Answer:** Vibriosis is spread from an infected bull to a cow during the breeding act and through artificial insemination if bull semen is unclean.

**Question:** What is prolonged or difficult labor due to heavy birth weight and/or small pelvic area of the dam called?

**Answer:** Dystocia

**Question:** Approximately how many nanograms of estrogen are produced daily by the human body of an adult male?

**Answer:** 100,000 nanograms

**Question:** When fire branding what technique is used and for what length of time?

**Answer:** Rock the brand for 3-5 seconds and remove.

**Question:** Generally, which breed type matures at an earlier age *Bos taurus* or *Bos indicus*?

**Answer:** *Bos taurus*
**Question:** Name four Bluestem varieties.

**Answer:** Pretoria 90, Gordo, Medio, Angleton, KR, Kleberg, and Caucasian.

**Question:** What portion of the diet is most critical in preventing Brown Stomach Worm infestations?

**Answer:** Protein.

**Question:** What is the most common device used in determining height in cattle?

**Answer:** Measuring stick.

**Question:** Which Bluestem grass variety was developed in the King Ranch area?

**Answer:** Kleberg Bluestem.

**Question:** The USDA medium frame size is a frame score of approximately what?

**Answer:** 3.0 to 5.0.
**Question:** Name one of the active compounds in calf growth implants?

**Answer:** Zeranol, estradiol benzoate-progesterone, or estradiol 17-beta.

**Question:** Capacitation describes what process?

**Answer:** The 6-8 hour maturation of sperm cells.

**Question:** Name 2 of the four measured factors used to formulate yield grades.

**Answer:** Fat thickness, Ribeye area, Carcass Weight, and KPH - kidney, Pelvic, Heart fat.

**Question:** Why is it important for a hay producer not to let Alfalfa become to dry and brittle after cutting?

**Answer:** In the process of raking and bailing of the Alfalfa's leaves, if brittle, will break apart and fall off of the plant.

**Question:** What is the term used for the release of the compound from a growth implant?

**Answer:** Payout.

**Question:** What term describes the sexual time when a cow is receptive to the bull?

**Answer:** Estrus, heat.
**Question:** How long (how many days) is the embryonic stage?

**Answer:** 38 Days

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**Question:** The average dressing percent for beef cattle is?

**Answer:** 63.5 % or 62 - 65%

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**Question:** What are the three factors that affect the palatability of meat?

**Answer:** Tenderness, Juiciness and flavor.

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**Question:** After a cow has given birth how long does it usually take for the fetal membranes to be expelled?

**Answer:** 8 to 12 hours

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**Question:** What supplies the digestive enzymes necessary for the breakdown of plant cellulose and hemicellulose in cattle?

**Answer:** Rumen microbes
**Question:** What is the formula for ADG

**Answer:** Weight Gained (ending weight -starting weight) / days on feed

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**Question:** This elastic-like ligament will stretch and move within the pelvic and body cavities of a cow to allow the reproductive tract to move as the weight of a fetus increases.

**Answer:** Broad Ligament

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**Question:** What is the term for selling cattle from one ranch to another or from ranch to feedlot or feedlot to packer?

**Answer:** Direct Sales

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**Question:** Define Dystocia

**Answer:** Prolonged or difficult labor due to heavy birth weight and/or small pelvic area of the dam.

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**Question:** What ingredient is commonly added to rations to help prevent feed separation and to settle dust in the mixed feed? This ingredient could be characterized as tasting sweet.

**Answer:** Molasses

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**Question:** Using a scale of 1 to 9 to describe body conditions which value would indicate a very thin cow.

**Answer:**


**Question:** Which part of the female reproductive tract has a firm, gristle-like feel and is often used as a landmark during palpation?

**Answer:** Cervix

**Question:** Name two key variables affecting where differing types and breeds of cattle can be produced?

**Answer:** Climate, nutrition, available feed stuffs

**Question:** What USDA Grade is a realistic goal for a steer project?

**Answer:** Choice

**Question:** What is Trichomoniasis, and what does it cause in cows?

**Answer:** It is a protozoan organism which causes a venereal disease, occasional abortions and pyometra

**Question:** If a person consumed one pound of beef per day from growth implanted cattle, how much is the potential estrogen intake?

**Answer:** 10 nanograms
**Question:** Between pasture and range which provides more forage production per acre?

**Answer:** Pasture

**Question:** In terms of breeding, name two factors directly affected by the scrotal circumference?

**Answer:** Total mass of sperm production tissue (sperm quantity), sperm cell normality and onset of puberty

**Question:** Estimates of the amount of boneless, closely trimmed retail cuts from the high-value parts of the carcass is the definition for what term?

**Answer:** Yield grade

**Question:** Bacteria, Viruses, and Fungi are all categories of microrganisms which pose potential health threats to cattle. To which of these categories can we attribute Foot Rot in cattle?

**Answer:** Bacteria

**Question:** Tube dehorners may be used on calves up to how many months of age?

**Answer:** 4 months
**Question:** Define Progeny.

*Answer:* The young or offspring of the parents.

**Question:** What is the most useful age to determining frame score?

*Answer:* 12 months

**Question:** What is the instrument utilized to castrate bull calves in a bloodless method that crushes the blood and nerve supply?

*Answer:* Burdizzo

**Question:** What is the normal body temperature for a beef animal?

*Answer:* 101.5 degrees.

**Question:** Name two ways you can prevent Vibriosis in the beef cattle.

*Answer:* Vaccinate cattle, use artificial insemination, treat infected animals.

**Question:** A bulls servicing capacity is determined based upon what two factors?
**Answer:** Number of mounts, services accomplished by the bull.

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**Question:** At about 38 days into gestation the placental membranes begin to attach to the uterine wall. These raised areas of attachment located on the uterine wall are called what?

**Answer:** Caruncles

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**Question:** If you were looking for a steer project, name three sources you would have available to you.

**Answer:** Auction barns, feed lots, purebred breeders, Commercial breeders, "Club Calf" Sales and Purebred sales

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**Question:** When freeze branding cattle, how long should the iron be held to the hide?

**Answer:** 30-40 seconds

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**Question:** USDA is a federal agency. What does U-S-D-A stand for?

**Answer:** United States Department of Agriculture

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**Question:** Describe the Burdizzo method of castration?

**Answer:** The cord above the testicle is isolated to the side of the scrotum and the burdizzo clamp is applied over it with the skin intact and left for about 1 minute.
**Question:** What are the indicators used when determining physiological age of an animal?

**Answer:** Ossification of cartilage, color of ribeye muscle, texture of ribeye muscle.

**Question:** What body condition score represents a very fat cow?

**Answer:** BCS 9

**Question:** In addition to suppressed testicular development and reduced libido, what is another side-effect of implants when used on bull calves intended for future use as herd sires?

**Answer:** Reduced semen quality

**Question:** Show Steers and Heifers are usually weaned between 6 and 8 months of age. At what age are they typically placed on feed?

**Answer:** Any answer between 6 and 10 months is correct

**Question:** What is Vac Prewean?

**Answer:** A vaccination management program designed to increase the level of resistance prior to weaning so that calves have more immunity as they enter various market channels.
Question: What are the symptoms of Trichomoniasis (trick-oh-moh-nye-uh-sis)?
Answer: They include occasional abortions and pyometra that impairs breeding efficiency.

Question: What is the approximate age range of a carcass with a maturity level of C?
Answer: 42-72 months

Question: What are two disadvantages of direct marketing?
Answer: More responsibility on the cattleman, more haggling, less market news available and wide variation in selling conditions.

Question: What is a good instrument for removing the testicle with a cutting blade while at the same time crushing the blood vessels to control hemorrhage during castrating?
Answer: Emasculator

Question: The British breeds of cattle were developed on what Islands?
Answer: The British Isles

Question: A cow is responsible for how much of the genetic make-up of the calf?
**Answer:** One half

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**Question:** What does Leptospirosis cause in cattle?

**Answer:** It causes repeat breeders, low grade uterine infectious, abortions, mastitis, and occasionally systemic infection.

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**Question:** Why does cartilage and bone maturity receive more emphasis in determining physiological maturity of a beef carcass?

**Answer:** Because lean color and texture of muscle can be affected by other post mortem factors.

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**Question:** When a bull is electroejaculated what should the semen be analyzed for?

**Answer:** Motility and normality

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**Question:** What three financial statements are useful in obtaining loans?

**Answer:** Net Worth, Projected Income and Cash Flow

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**Question:** How many days after fertilization does the embryo and placental membranes begin to release a hormonal signal to prevent the release of prostaglandin?

**Answer:** 16-17 days
**Reproductive Diseases in Cattle**

**Question:** To prevent heptospirosis what should be done?

**Answer:** Vaccinate cattle with Bactrians, containing 3 or 5 stereotypes every 6 months.

**Determining Pregnancy in Cattle**

**Question:** The entire reproductive tract of a cow is attached to a thin suspensory membrane known as what?

**Answer:** Broad Ligament

**Managing Beef Cattle for Show**

**Question:** At what age should beef cattle be vaccinated for brucellosis?

**Answer:** 6-12 months (at weaning)

**Implanting Beef Calves and Stocker Cattle**

**Question:** Depending on the type of implant, an implant releases (or pays out) compound for how many days?

**Answer:** 70 to 400 Days

**Beef Cattle Leader Guide**

**Question:** How are animals unfit for consumption identified?

**Answer:** Tagged US Condemned

**Determining Pregnancy in Cattle**

**Question:** The entire reproductive tract of a cow is attached to a thin suspensory membrane known as what?
**Question:** When the calf embryo is about 38 days old, the fetus period begins. The unborn calf will continue to be called a fetus until what event occurs?

**Answer:** Birth or Parturition

**Question:** What three groups of information should you as a producer consider when selecting a heifer?

**Answer:** (1) Pedigree, (2) Performance information, (3) Visual appraisal

**Question:** In designing your Working pens, should sides be open so the cattle can see out or solid to restrict their view?

**Answer:** solid

**Question:** What body condition score is a cow that is in average body condition classified as?

**Answer:** BCS 5

**Question:** What yield grade number denotes the lowest yielding carcass?

**Answer:** 5

**Question:** Which inorganic mineral source has the lowest bioavailability?
Question: Why and how often should a hay producer take a soil test?

Answer: A soil test should be taken once a year. A soil test will determine what elements need to be replaced/increased after the previous years production.

Question: What is puberty?

Answer: Age at which reproductive organs become functional

Question: In terms of chronological age, when do buttons begin to ossify?

Answer: 30 months of age

Question: Pasture infestation by Brown Stomach Worm larvae can be reduced by what two herd management practices?

Answer: Prevent overcrowding, and separate cattle by age groups.

Question: There are three main stages in a young calf's life: ovum, embryo and fetus. Which of these stages begins at approximately 38 days?

Answer: Fetus
**Question:** What is the term for pregnancy determination made by inserting the arm into the cow’s rectum and feeling the reproductive tract for pregnancy indications?

**Answer:** Palpation

**Question:** There are three main stages in a young calf’s life: ovum, embryo and fetus. Which of these stages begins on about the 30th day of gestation?

**Answer:** Embryo

**Question:** To effectively utilize low quality forage beef cattle producers should supplement what nutrient.

**Answer:** Protein.

**Question:** The majority of growth implants available to cattlemen have a release time of how long?

**Answer:** 100 to 140 days

**Question:** How many scores does the cattle frame chart list?

**Answer:** 6 Frame Scores
**Question:** The term for a non pregnant cow?

**Answer:** Open

**Question:** Which mating plan implies that all individuals in a genetic population are related to some extent?

**Answer:** Pedigree Mating

**Question:** What two benefits are gained from having plenty of water available 24 hours prior to slaughter?

**Answer:** Free complete bleeding and easier hide removal

**Question:** Name the genus and species of beef cattle that are known for performing well in hot climates.

**Answer:** Bos indicus

**Question:** What is the maximum temperature of coolers in a processing plant?

**Answer:** 45 degrees Fahrenheit

**Question:** If an intramuscular injection must be given, what should be considered when selecting the product?

**Answer:** Select a product to be administered at a low dose with evidence of minimal tissue irritation.
**Question:** Mating plans based on performance or visual appearance are called what?

**Answer:** Phenotype mating

**Question:** Dystocia problems not only increase the death loss of calves, but cows experiencing difficulty during calving have significantly lower what?

**Answer:** Fertility at rebreeding (calving rates)

**Question:** Name three things important to keeping a vaccine effective.

**Answer:** Keep refrigerated, Do not expose the vaccine to direct or indirect sunlight for extended period of time, keep free of blood, feces, hair and dirt, do not use chemicals to disinfect equipment.

**Question:** At what age should a steer reach the correct weight for slaughter?

**Answer:** 14-20 months

**Question:** Of the warm season, annual grasses which is a hybrid with Johnson grass as a parent?

**Answer:** Sorghum - alum
**Question:** Name three of the steps or viewing angles used when judging beef animals.

**Answer:** (1) an overall view, (2) side, (3) rear, (4) front and (5) close or contact step.

**Question:** What are two visual conditions of cows that should be used to cull?

**Answer:** Age of cow, udder characteristics, condition of teeth, feet, and legs.

**Question:** What is the normal pH range for the rumen?

**Answer:** 5.5 to 7.0

**Question:** What Legislative Act set standards for methods and equipment used in slaughtering livestock and poultry?

**Answer:** National Humane Slaughter Act

**Question:** This metabolic disorder in cattle is characterized by increased blood flow to the hooves and rapid growth of the hooves. It is usually associated with eating too much grain.

**Answer:** Founder

**Question:** List three factors that affect hay quality?
Answer: Climate, fertility, weed control, stage of maturity at harvest, harvest condition, and storage.

**Question:** At approximately what time during gestation does the embryo begin to attach to the uterus?

**Answer:** ~ 38 days

**Question:** In cattle, the cavity on the ovary left by the ruptured follicle following ovulation develops into a new structure known as what?

**Answer:** Corpus luteum

**Question:** Define Phenotype.

**Answer:** The visible or measurable expression of a character: For example, weaning weight, postweaning gain, reproduction etc.

**Question:** What do the Leydig cells produce?

**Answer:** Testosterone

**Question:** Name two types of external flies a producer / exhibitor should treat.

**Answer:** Stable, horn, and face flies
**Question:** On the cattle frame score chart, what are the ages listed?

**Answer:** 5 - 21 months and mature

**Question:** A breed of cattle formed from two or more breeds is called what?

**Answer:** Composite

**Question:** Of these 4 EPD traits: Calving ease, birth weight, weaning weight, and yearling weight; which is the most reliable trait to evaluate when considering selection of a sire for first time heifers?

**Answer:** Calving ease

**Question:** What hormone regresses or destroys the corpus luteum?

**Answer:** Prostaglandin

**Question:** What is the minimum percent sperm normality required for a bull to pass a breeding soundness evaluation?

**Answer:** 70 percent
**Question:** Continental breeds of cattle generally originate from where?

**Answer:** Western Europe

**Question:** What are two disadvantages of auction markets?

**Answer:** No seller input in pricing, selling cost per head may be higher, encourages multiple handling, discourages market innovation.

**Question:** What is the minimum percent sperm motility required for a bull to pass a breeding soundness evaluation?

**Answer:** 30 percent

**Question:** How many compartments is the ruminant stomach divided into?

**Answer:** Four

**Question:** What type of protein is degraded in the rumen and provides the rumen microbes with nitrogen.

**Answer:** Degradable protein

**Question:** Why do cattle prefer afternoon cut hay over morning cut hay?
**Answer:** Afternoon cut hay contains a higher level of sugars and carbohydrates.

**Question:** The entire female reproductive tract is attached by what?

**Answer:** The broad ligament

**Question:** Which group of minerals is needed in very small amounts in cattle, but plays an important role in animal performance.

**Answer:** Trace minerals

**Question:** The Food and Drug Administration requires a withdrawal period of how long before the slaughter of implanted cattle?

**Answer:** 0 days, none

**Question:** What major organs of the bull’s reproductive system are responsible for producing sperm and testosterone?

**Answer:** Testicles

**Question:** Name two structural conditions of the legs that could render a bull unable to breed.

**Answer:** Sickle Hocks, post legs, bent or knocked knees.
There are three main stages in a young calf's life: ovum, embryo and fetus. Which of these stages lasts from fertilization of the egg until the egg has divided enough times to take on a particular form?

Answer: Ovum

What is one advantage of electronic marketing of cattle?

Answer: Exposes offering to many buyers, provides entry to small markets, increases marketing efficiencies, equalizes market power, improves health conditions of cattle.

How many days prior to calving should cows have their body condition evaluated?

Answer: 90 to 100 days

What term describes a decrease in forage consumption due to feeding energy sources?

Answer: Substitution

How often should cows calve in order to optimize profitability in the cow-calf business?

Answer: Every 12 months
**Question:** If a cow is mated during estrus, the sperm cells will travel from the site of deposition to the site of fertilization. In natural service where is the site of deposition?

**Answer:** The Vagina

**Question:** What is the range of optimum body condition scores at calving for beef cows?

**Answer:** BCS 5 to 7

**Question:** What organ of the bull’s reproductive system supports and encloses the testicles?

**Answer:** Scrotum

**Question:** Show Steers are usually on feed for about 270 days and gain how many pounds a day?

**Answer:** Any answer between 2 and 3.5 is correct

**Question:** What are three causes of dystocia?

**Answer:** Small, underdeveloped heifers, Excess protein, Improper calf posture, and Heavy birth weights.
**Answer:** Manual palpation of the testes, spermatic cords and epididymis.

**Question:** A properly designed vaccination program helps reduce what?

**Answer:** Medicine costs, death losses, and incidence of illness are all correct answers.

**Question:** What happens to dry matter intake when forage protein content falls below 7 percent?

**Answer:** It decreases

**Question:** Give the three reasons why there is no "best" type of breed for beef production?

**Answer:** Variation in climates, production conditions, and market conditions.

**Question:** Of the four major beef projects; Market Steers, Breeding Heifers, Commercial Steers, and Commercial Heifers, which of these projects are typically not halter broke?

**Answer:** Commercial Steers and Commercial Heifers

**Question:** A pedigree plan that mates individuals less related than average is called what?

**Answer:** Outbreeding or outcrossing
**Question:** Which inorganic mineral source has the highest bioavailability?

**Answer:** Sulfates

**Question:** Dehorning, castration, and branding all have one characteristic in common. What is it?

**Answer:** They are most successful and less stressful to young calves than to animals at weaning or older.

**Question:** A prime + quality grade has what as a marbling score?

**Answer:** Abundant

**Question:** Is vaccinating always recommended by a veterinarian, and why?

**Answer:** No, some vaccines may result in abortions.

**Question:** List the two intra nasal vaccines.

**Answer:** Nasale IP and TSV-2

**Question:** What are two of the four compartments in the ruminant stomach?
**Answer:** Rumen, reticulum, omasum, or abomasum

---

**Question:** USDA yield grades are used to estimate carcass cutability or percent, what?

**Answer:** Percent Lean Yield

---

**Question:** What stage of the calving process is the time of expulsion and actual delivery of the calf?

**Answer:** Delivery stage.

---

**Question:** Name the reproductive process in which the follicle ruptures and releases an egg?

**Answer:** Ovulation

---

**Question:** When reviewing EPD's as the number of offspring from a sire increases, what also increases?

**Answer:** The accuracy of his predicted performance increases.

---

**Question:** What are three things the USDA Veterinarian Inspector is looking for prior to slaughter?

**Answer:** Obviously diseased animals, seriously crippled animals, animals with abnormal body temperature, animals displaying other symptoms of disease.
**Question:** What body condition score represents a very thin cow?

**Answer:** BCS 1

**Question:** A pedigree plan that mates individuals more closely related than the average of the population is called what?

**Answer:** Inbreeding

**Question:** What hormone is responsible for maintaining pregnancy?

**Answer:** Progesterone

**Question:** In addition to marbling, what are two other ways to evaluate beef for quality?

**Answer:** Firmness, color and texture.

**Question:** What does ADG stand for?

**Answer:** Average Daily Gain
**Question:** As an animal ages, what will the color of the lean of the ribeye do?

*Answer:* Darken

**Question:** What is the preweaning option for the Value Added Calf - 45?

*Answer:* To administer Cattle Master vaccine 4-6 weeks prior to weaning. When the calves are penned, re-vaccinate with one of the modified live virus caccia (MLV)

**Question:** What are two functions of the epididymis?

*Answer:* Concentration, storage, maturation, and transportation of sperm

**Question:** Where is the amount and distribution of marbling measured?

*Answer:* In the ribeye muscle between the 12 & 13 ribs

**Question:** Cattle that receive low quality hay need what in addition and why?

*Answer:* Cattle will need a supplement in addition to the hay. This is due to the fact that animals nutritional requirement is not being met.

**Question:** Which component of fiber is the least digestible?
**Answer:** Lignin

**Released April 16, 2009**  
**Resource:** Determining Pregnancy in Cattle B-1077  
**Page:** 5  
**Code:** 4045

**Question:** What is the hormone responsible for maintaining pregnancy in cattle?  
**Answer:** Progesterone

**Released April 16, 2009**  
**Resource:** Cattle types and Breed Characteristics and uses L-5206  
**Page:** 2  
**Code:** 4100

**Question:** The body's capacity to fatten and retain fat is called what?  
**Answer:** Fleshing ability

**Released April 16, 2009**  
**Resource:** Beef Quality and Yield Grading  
**Page:** 4  
**Code:** 2113

**Question:** What is the approximate live age range of a carcass with a maturity level of D?  
**Answer:** 72-96 months

**Released April 16, 2009**  
**Resource:** Managing for High Quality Hay L-5219  
**Page:**  
**Code:** 2284

**Question:** List three management practices that potentially could improve hay quality.  
**Answer:** Cutting forages in the afternoon, laying down hay on a dry ground or stubble to prevent soil moisture from rising into the cut hay, using a raking operation that would not cause leaf loss, and baling at the proper moisture contents.

**Released April 16, 2009**  
**Resource:** Determining Pregnancy in Cattle B-1077  
**Page:** 5  
**Code:** 2337

**Question:** Estrus or heat on average occurs every how many days in an open cow?  
**Answer:** 21
Question: A physical examination, an internal and external examination of the reproductive tract, and semen evaluation are components of what beef cattle management practice?

Answer: Breeding soundness evaluation or breeding soundness exam

Question: What is Artificial Insemination?

Answer: The technique of placing semen from the male into the reproductive tract of the female by means other than natural service.

Question: Shots should be administered in what region of the body?

Answer: In front of the shoulder

Question: What are two advantages of direct sales?

Answer: Sellers can merchandise their own animals, exercise independence, encourages innovation in marketing and (possibly) lower selling cost per head.

Question: The predicted frame size for a 1,000 to 1,200 pound steer is what?

Answer: Medium
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Why is multiple handling from an auction market a disadvantage?</td>
<td>Often buyers must go to many sales before putting together a lot or load of similar cattle. Sometimes cattle must be held one or two weeks in the assembly process which may stress or disease the cattle. (basic concept of increased handling causing stress and disease)</td>
</tr>
</tbody>
</table>

**Question:** According to "Avoiding Calving Problems" resource, what is the main cause of calving problems?  
**Answer:** Heavy Birth weights.

**Question:** In a breeding season, what is the approximate maximum number of cows that the bull can service a year?  
**Answer:** 50

**Question:** What season of the year is the most critical time period to supply adequate protein to prevent Brown Stomach Worms?  
**Answer:** Spring

**Question:** Accoding to Corral and Working Facilities for Beef Cattle, what is the most common error in holding pen design?  
**Answer:** Insufficient holding space for sorting cattle as they exit the squeeze chute.
**Question:** In Texas approximately 8 to 10 percent of all calves born in beef cow herds die at or soon after birth, approximately 3 quarters of these deaths are related to what?

**Answer:** Dystocia or calving difficulty.

**Question:** Define Feed Conversion.

**Answer:** It is the units of feed consumed per unit of weight gained.

**Question:** What species of beef cattle perform well in hot climates?

**Answer:** Bos Indicus

**Question:** Approximately how many pounds of nitrogen are in 1 ton of forage?

**Answer:** 50 pounds

**Question:** At what age should clostridia organisms or Black Leg be vaccinated for?

**Answer:** At 2-4 months of age and booster at weaning

**Question:** What is a scur?

**Answer:** Horny tissue or rudimentary horns that are attached to the skin rather than the bony parts of the head.
|------------------------|-------------------------------------------------------------|
| **Question:** Which of the four stomach compartments is responsible for the reabsorption of water from the digesta flowing through it?  
**Answer:** Omasum |

|------------------------|-------------------------------------------------------------------|
| **Question:** What is Vibriosis and what does it cause?  
**Answer:** It is a venereal disease causing infertility and, occasionally, abortions. |

|------------------------|-------------------------------------------------------------------|
| **Question:** Of the three types of rations: Starter, Grower, and Finisher, which would be used in the last stage of feeding and would be characterized by having a very high energy content?  
**Answer:** Finisher |

|------------------------|-------------------------------------------------------------------|
| **Question:** What are three characteristics of cattle's vision?  
**Answer:** They see black and white, they can see a possible 360 degrees (wide angle) and they have poor depth perception. |

|------------------------|-------------------------------------------------------------------|
| **Question:** Name two Bermuda grass varieties that can be established from seed.  
**Answer:** Common and Giant. |
**Question:** What warm season perennial grass was released in 1983 by Texas A&M as higher quality than Coastal, but produces slightly less tunnage?

**Answer:** Brazos Bermuda grass

**Question:** Body condition scores are numbers used to suggest what?

**Answer:** Relative fatness or body composition of the cow.

**Question:** Most Cattlemen have an auction market within how many miles of their ranch?

**Answer:** 50

**Question:** What is the purpose of a Cash Flow Statement?

**Answer:** Estimate the cash situation for the year.

**Question:** Define Libido

**Answer:** Sex drive

**Question:** How long before the start of the breeding season should a Breeding Soundness Evaluation be performed?
Answer: 30 - 60 days

Released April 16, 2009

Question: While in the reproductive tract of the cow, sperm cells go through a 6 to 8 hour maturation process called what?

Answer: Capacitation

Released April 16, 2009

Question: Saws are used when dehorning mature cattle to avoid what?

Answer: Crushing, and cracking of the bone (skull).

Released April 16, 2009

Question: Calving difficulty is commonly referred to as?

Answer: Dystocia

Released April 16, 2009

Question: What is Average Daily Gain?


Released April 16, 2009

Question: When using the obstetrical chain on the front legs of the calf describe the proper loop and placement of the chains.

Answer: Use a double loop on each leg, place the first loop about 4 inches above the ankle joint and dew claws then form a half hitch about 2 to 3 inches down the leg, but above the ankle.
Question: What are the three most common types of headgates?

Answer: Self-catch, Stanchion and Guillotine

Question: At what age does Vibriosis become established in the bull?

Answer: Not until the bull is about 4 years old or older.

Question: Name one marketing method available to producers?

Answer: Auction markets, direct sales, electronic marketing, integration and group marketing.

Question: Of the three types of rations: Starter, Grower, and Finisher, which would be described as being low in energy, high in roughage and fiber, and high in protein relative to the energy content?

Answer: Starter

Question: How do vaccine products cause protection from disease?

Answer: Products deliver antigens that stimulate the body's immune system response through production of antibodies.
**Question:** What are the high-value parts of the carcass?

**Answer:** Round, loin, rib, and chuck

**Question:** As energy content increases, what does feed intake generally do?

**Answer:** Decreases

**Question:** How much time will a cow spend grazing per day?

**Answer:** 6-12 hours

**Question:** When measuring fat thickness to determine yield grade, the measurement is taken between what two ribs?

**Answer:** The 12th and 13th ribs

**Question:** On average what is the length of time (in days) from fertilization to birth of a calf?

**Answer:** 280 Days

**Question:** If you plan to show a steer at a major show occurring between January and March, the steer would typically be born in a range of months. Give us one month in that range.
**Answer:** Any answer between and including August and January is correct

**Question:** Determining pregnancy by placing the arm into the cow's rectum and feeling for pregnancy indications is called what?

**Answer:** Palpation

**Question:** What is the percentage of bulls that can not breed even though they have a high libido?

**Answer:** 10% to 35%

**Question:** Name the organization that regularly publishes the amounts of each nutrient needed by cattle for various levels of performance.

**Answer:** The National Research Council

**Question:** Calves from a few weeks of age until what age may be castrated without serious consequences?

**Answer:** 8 months

**Question:** What happens to forage consumption when cattle are fed increasing levels of high energy supplements?

**Answer:** Decreases
Question: Name 2 of the four compartments that make up a cow's stomach.

Answer: Rumen, Reticulum, Omasum, Abomasum

---

Question: Name three examples of a British breed.

Answer: Angus, Hereford, and Shorthorn.

---

Question: An abnormal condition in ruminants caused by an accumulation of gas; characterized by a distension of the rumen seen on the animal's upper left side... This condition is commonly referred to as what?

Answer: Bloat

---

Question: Name two possible structural unsoundness of feet and legs that would prevent a bull from traveling or mounting.

Answer: Sickle hocks, post legs, bent or knocked knees.

---

Question: In the female reproductive tract, the "Y" shaped organ with two horns is called what?

Answer: Uterus
**Question:** What do you call an immature female?

**Answer:** Heifer

**Question:** What is the function of adjuvants in a vaccine?

**Answer:** Slow the release of Antigen into the body and prolong immune response.

**Question:** The proper placement of a Growth Implant is?

**Answer:** On the backside of the ear or in the middle third of the ear.

**Question:** What are 3 factors to consider when selecting a head gate or squeeze chute?

**Answer:** Purchase cost, size and type of beef cattle operation, and availability of labor.

**Question:** According to the publication "Corral and Working Facilities for Beef Cattle", what are three desirable characteristics of a loading chute?

**Answer:** Curved approach, totally enclosed sides, telescoping side panels, self aligning dock platform, circular crowding area, and located near scales.

**Question:** What is the minimum scrotal circumference required for a two year old bull to pass a breeding soundness
evaluation?

*Answer:* 33 cm

**Released April 16, 2009**

*Resource: Implanting Beef Calves and Stocker Cattle L-2291 Page: 2 Code: 4084*

**Question:** Implanting suckling calves once with zeranol or estradiol-progesterone type implants will increase daily weight gains an average of how many pounds per day for steer calves?

*Answer:* 0.10 pound per day

**Released April 16, 2009**

*Resource: Frame Score and Weight of Cattle L-5176 Page: 2204*

**Question:** The USDA large frame size is a frame score of approximately what?

*Answer:* 5.0 to 7.0

**Released April 16, 2009**


**Question:** If a cow has scours, generally what problem does it lead to?

*Answer:* dehydration

**Released April 16, 2009**

*Resource: Beef Quality and Yield Grading Page: 2 Code: 2174*

**Question:** What is the primary factor used in the determination of quality grading?

*Answer:* Degree of marbling.

**Released April 16, 2009**

*Resource: Reproductive Diseases in Cattle L-5223 Page: 1 Code: 2267*

**Question:** Is there a vaccination for Bang's Disease, and at what age do you vaccinate?

*Answer:* Yes, and it is recommended that all heifers be vaccinated between 4 and 12 months of age.
**Question:** Name the two different types of steer projects available to junior exhibitors.

**Answer:** Commercial steer Projects and Halter show Steer Projects.

**Question:** Show cattle generally consume what % of their body weight?

**Answer:** 2 - 3 %

**Question:** Which component of fiber is most digestible?

**Answer:** Hemicellulose

**Question:** Where does nutrient absorption occur in the Cow’s digestive tract?

**Answer:** Small intestine

**Question:** Define Steer

**Answer:** Castrated male bovine
**Question:** How many days prior to the start of the breeding season should bulls be evaluated for breeding soundness?

**Answer:** 30-60 days

---

**Question:** What are 3 of the 6 characteristics for a desirable working chute?

**Answer:** Curved, enclosed sides, sloping sides, overhead restraints, 70 foot long, and rough concrete floor.

---

**Question:** Poor harvesting of hay can cause up to what percent loss on digestible nutrients?

**Answer:** 50 %

---

**Question:** Give one advantage of auction markets.

**Answer:** Convenience, Fast selling, ready market, weighing and selling are regulated and uniform and freedom as to when, where and what to sell.

---

**Question:** What is a Freemartin?

**Answer:** A female born twin to a bull calf. 90% chance the female twin will be infertile (not fertile).

---

**Question:** During castration once the scrotum is open the next proper step is to?
**Answer:** Remove the testicle

---

**Question:** What is the most widely adopted high potential pasture grass in Texas?

**Answer:** Coastal Bermuda grass

---

**Question:** What are two advantages of electronic marketing?

**Answer:** Exposes offering to many buyers, provides entry to small markets, increases marketing efficiencies, equalizes market power, improves health conditions of cattle.

---

**Question:** In terms of nutrition what does TDN stand for?

**Answer:** Total Digestible Nutrients

---

**Question:** What is one advantage to auction markets?

**Answer:** Convenience, Fast selling, ready market, weighing and selling are regulated and uniform and freedom as to when, where and what to sell.

---

**Question:** In beef cattle reproduction, where does fertilization take place?

**Answer:** Oviduct
**Question:** Bangs is the common name for what disease?

**Answer:** Brucellosis

**Question:** Define Purebred.

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

**Question:** Which vertebra ossify first as an animal matures?

**Answer:** Sacral vertebra

**Question:** What information is available on a Projected Income Statement?

**Answer:** Projected expenses and Projected income.

**Question:** What body condition or score or grade is sought to ensure high pregnancy rate?

**Answer:** 5 or more
**Question:** What is the simplest, most useful method for estimating relative skeletal size?

**Answer:** Frame Score

---

**Question:** Between which ribs do graders evaluate amount and distribution of marbling?

**Answer:** Between 12th and 13th ribs

---

**Question:** What is the second dose of a killed vaccine called?

**Answer:** Booster shot

---

**Question:** In reproduction, where is the site of fertilization?

**Answer:** Oviduct

---

**Question:** In cattle, what do you call a castrated male?

**Answer:** Steer

---

**Question:** Which hormone causes a cow to display estrus or heat?

**Answer:** Estrogen
**Question:** Fat deposits inside the muscle of a beef cattle carcass are what?

**Answer:** Marbling

**Question:** What is one disadvantage of direct marketing of cattle?

**Answer:** More responsibility on the cattleman, more haggling, less market news available and wide variation in selling conditions.

**Question:** Where do cattle typically graze in a pasture?

**Answer:** Flatlands and valleys

**Question:** At what age do cattle reach about 90% of their mature height?

**Answer:** 12 months

**Question:** What is the State Grass of Texas?

**Answer:** Sideoats grama
**Question:** Which warm season grass is a perennial, but behaves as an annual?

**Answer:** Johnson grass

**Question:** Crossbreeding often increases performance above what might be expected from either parent. What is the term for this effect?

**Answer:** Hybrid vigor or heterosis

**Question:** List three beef cattle characteristics to take into consideration when handling cattle.

**Answer:** Vision, hearing, smell, even disposition, develop a homeland, herd animals and social order

**Question:** When palpating for pregnancy, how do you determine the difference in the paunch and the uterus?

**Answer:** Mashing on the organ. The paunch will indent.

**Question:** What is a vaccine containing killed bacteria called?

**Answer:** bacterin

**Question:** The sex of the calf, nutrition level of the cow, and genetic influence on birth weight by the sire all influence what?
**Answer:** Birth weight

**Released April 16, 2009**

**Question:** What two factors in a Breeding Soundness Exam can only be assessed by observation of the bull during the mating season?

**Answer:** Libido and ability to mate

**Released April 16, 2009**

**Question:** What is the term for the progeny of crossbreeding two purebreds?

**Answer:** F1

**Released April 16, 2009**

**Question:** The Corpus Luteum produces a hormone which is responsible for the maintenance of pregnancy. What is this hormone?

**Answer:** Progesterone

**Released April 16, 2009**

**Question:** What practice is generally recommended to determine pregnancy in cattle?

**Answer:** Rectal palpation, Pregnancy testing

**Released April 16, 2009**

**Question:** Name one nonprotein nitrogen source for cattle.

**Answer:** Urea or Biuret
**Question:** The most optimum range of Body Condition Score to maintain cattle in would be what?

**Answer:** Five to Seven

---

**Question:** Ionophores are added to feed rations to improve feed efficiency. In addition to improving feed efficiency, they also suppress or control what?

**Answer:** Acidosis, Bloat, and Coccidiosis are all correct answers

---

**Question:** Signs of bloat include the swelling of the abdominal cavity. On which side of the animal is this swelling most prominent?

**Answer:** The left side

---

**Question:** Why was the Cattle Inspection Act of 1891 not successful?

**Answer:** Voluntary nature of this act and/or lack of sanitation regulations

---

**Question:** Name 2 of the 5 marketing methods available to cattleman.

Question: What is the body condition score when bone structure of the shoulder, ribs, back, hooks and pins are sharp to touch and easily visible?

Answer: 1

Question: Which compartment of the ruminant stomach is similar in function to the human stomach?

Answer: Abomasum

Question: When referring to the egg in the female bovine, what is the correct term a cattleman should use?

Answer: Ovum

Question: Commercial Feed law requires each bag or bulk load to be accompanied by a label with seven items of information listed, what are three of them?

Answer: (1) Net weight, (2) Product name and brand name, (3) Drug additives, (4) Guaranteed analysis of feed, (5) Common and usual name of each ingredient, (6) Directions for use and Name and (7) Principal mailing address of manufacturer.

Question: In cattle, at approximately what day in gestation does the embryonic stage end?

Answer: 38 days
**Question:** What is a toxoid vaccine?

**Answer:** One containing inactivated toxins

---

**Question:** What is the **inter** muscular dispersion of fat within the loin?

**Answer:** Seam Fat

---

**Question:** Each end of the uterine horn of a cow's reproductive tract is attached to an oviduct. This oviduct is also know as what type of tube?

**Answer:** A fallopian tube

---

**Question:** Rumen microbes can use this in the synthesis of microbial protein?

**Answer:** Non-protein nitrogen

---

**Question:** What are the three steps to avoid calving problems?

**Answer:** Choose the heaviest heifers as replacements, grow them to an acceptable weight, and mate them to an easy calving bull.

---

**Question:** What are USDA Prime, Choice, Select and Standard used to identify?
**Answer:** Quality grades

**Released April 16, 2009**

**Question:** What should a freeze branding iron look like?

**Answer:** Copper with a convex (curved out) face

**Released April 16, 2009**

**Question:** A generic term used to describe a type of feed or additive that is added to an existing feed?

**Answer:** Supplement

**Released April 16, 2009**

**Question:** What two conditions will kill Brown Stomach Worm larvae in pastures?

**Answer:** Starving and drying

**Released April 16, 2009**

**Question:** What is the term used for the area in a pen or pasture where cattle develop a distinctive, comfortable attachment to?

**Answer:** Homeland

**Released April 16, 2009**

**Question:** In terms of fatness, a cow with a body condition score of 9 would be considered what?

**Answer:** Extremely Fat
**Question:** There are generally three divisions or breed types that an exhibitor may enter in a local show. British and Continental are two of these breed types. Name the third.

**Answer:** American

**Question:** Which technique should be used when administering subcutaneous injections?

**Answer:** Use the "Tinted" technique.

**Question:** What is the approximate live age range of a carcass with a maturity level of B?

**Answer:** 30-42 months

**Question:** Name two pieces of equipment needed to palpate a cow.

**Answer:** Protective plastic sleeve, lubricant, and chute.

**Question:** Give one of the problems that might occur when hay is baled at too high of a moisture level.

**Answer:** Mold can develop, bacterial degradation can occur, and in some instance it can catch on fire.
**Question:** Name four of the six most common reproductive diseases in cattle?

**Answer:** Brucellosis, leptospirosis, infectious Bovine Rhinotrachectis, bovine virus, diarrhea complexes, Vibrosis, and trichomoniasis.

**Released April 16, 2009**

**Question:** In livestock judging, list the six sections covered in organizing reasons.

**Answer:** Introduction, Top Pair paragraph, Middle Pair paragraph, Bottom Pair Paragraph, Bottom individual paragraph and closing statement.

**Released April 16, 2009**

**Question:** What is the most effective way to reduce birth weights?

**Answer:** Use a bull that is known to sire calves with light birth weights.

**Released April 16, 2009**

**Question:** What criteria are used to assign yield grade to a carcass?

**Answer:** Amount of external fat, hot carcass weight, the amount of kidney, pelvic and heart fat, area of ribeye

**Released April 16, 2009**

**Question:** Brown Stomach Worm larvae ingested in June emerge and mature into adult worms in what month?

**Answer:** September

**Released April 16, 2009**

**Question:** What is marbling?
**Answer:** Marbling is intra muscular fat.

**Question:** Name three Bermuda Grass varieties.

**Answer:** Coastal Bermuda, Brazos Bermuda, tifton-44, callie bermuda, NK-37, Tifton 85, jiggs, and common.

**Question:** A producer weaned all of his calves when they are 7 months old. He had 100 cows calved during calving season. At weaning he weaned 94 calves. What is the producers calf crop?

**Answer:** 94 %

**Question:** When a show calf is suffering from coccidiosis the calf will often have scours. What else would you likely see in a calf's stool that indicates the calf may be suffering from coccidiosis?

**Answer:** Blood

**Question:** What information is provided on a Net worth Statement?

**Answer:** (1) Things you own (assets), and (2) amounts you owe (liabilities)

**Question:** What causes a dark cutter?

**Answer:** Exposure to Beef Stress Syndrome prior to slaughter.
**Question:** What are the five steps involved in cattle slaughter?

**Answer:** Stunning and immobilization, Bleeding, Dressing, Evisceration and Chilling

**Question:** In which mating plan is no action taken to determine which animals mate?

**Answer:** Random mating

**Question:** Name two management practices that would help prevent Leptospirosis.

**Answer:** Vaccinate cattle with bacterins containing three or five serotypes every six months, drain stagnant bodies of water, eliminate rodents, especially rats from barns or sheds where cattle congregate.

**Question:** The reproductive organ that produces the ovum or egg during estrus is called what?

**Answer:** The ovary

**Question:** What are three of the five types of behavior which are indicators of attitude?

**Answer:** (1) Stance/posture, (2) Movement/Gait, (3) Appetite/Eating Habits, (4) Voice, (5) Sexual Activity
**Question:** What is the name of the inspection cattle go through prior to slaughter?

**Answer:** Antemortum Inspection

Released April 16, 2009

**Question:** Describe the proper direction and angle in pulling a calf.

**Answer:** Pull the calf out and down at a 45 degree to 60 degree angle.

Released April 16, 2009

**Question:** When scoring a BSE on a bull, what is the minimum sperm motility?

**Answer:** 0.3

Released April 16, 2009

**Question:** On average a show steer grows how many inches each month between weaning and finishing?

**Answer:** 3/4 of an inch

Released April 16, 2009

**Question:** What Love grass varieties are best adapted to extremely sandy soils?

**Answer:** Weeping love grass

Released April 16, 2009

**Question:** List four of the seven trade names of injectable vaccines that meet the criteria for post-weaning vaccinations.

**Answer:** Bovishield 4, Express 5, Frontier IBR Plus 4-wzx, Jenco 4, Pyramid MLV 4, Titanium
**Question:** Calving interval is defined as?

**Answer:** Period from birth of one calf to the next.

**Question:** What are the three primary nutrients critical to producing high quality hay?

**Answer:** Nitrogen, Phosphorous, Potassium

**Question:** What record can be used to select a bull with low birth weights for calves?

**Answer:** EPD's (Expected Progeny Differences)

**Question:** Prior to 1900 there had been several federal meat inspection acts passed. Why were these not effective?

**Answer:** Lack of enforcement

**Question:** When is the proper time to vaccinate for black leg?

**Answer:** Before weaning, fall and by a booster 2-3 later and 6-8 months later
**Question:** What are three benefits of crossbreeding over restriction to a single breed?

**Answer:** Heterosis, Breed combination, and complementarity

**Question:** When determining beef carcass maturity, where does ossification begin?

**Answer:** The sacral region

**Question:** What is the range of body condition scores used when evaluating cattle?

**Answer:** 1 to 9

**Question:** In cattle, within 24 hours of the initial stages of estrus, a follicle ruptures releasing what?

**Answer:** An egg or ovum

**Question:** Where did the Bos indicus (Zebu) originate?

**Answer:** Bos indicus originated in South Central Asia.

**Question:** Cattle breeds are divided into what two basic classifications?

**Answer:** Bos indicus and Bos taurus
**Question:** What colors can cattle see?

**Answer:** None - Black and white

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**Question:** What is the average length of the bovine gestation period?

**Answer:** 280 or 283 days

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**Question:** What is considered the moderate body condition score?

**Answer:** Moderate body condition score is a 5.

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**Question:** What is the system used for evaluating a beef cow’s body reserves?

**Answer:** Body condition scoring

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**Question:** What type of protein is not degraded in the rumen, but escapes into the small intestine and is then degraded?

**Answer:** Escape protein

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**Question:** What is the system used for evaluating a beef cow’s body reserves?
Question: What extends from the epididymis to the ampullae?

Answer: Vas Deferens

Released April 16, 2009

Question: What does EPD stand for?

Answer: Expected Progeny Differences

Released April 16, 2009

Question: Give the definition for (TDN) Total Digestible Nutrients.

Answer: An estimated percent of the total digestible nutrients. It is based on the acid detergent fiber of the quantity of available nutrients in the forage.

Released April 16, 2009

Question: What stage of the calving process is occurring when the uterus begins contracting and the cervix dilates, ending with the movement of fetal parts into the birth canal?

Answer: Preparatory stage.

Released April 16, 2009

Question: Name three desirable characteristics of a loading chute?

Answer: Curved approach, totally enclosed sides, telescoping side panels, self aligning dock platform, circular crowding area, located near scales.

Released April 16, 2009

Question: Name the term for the 6-8 hour maturation of sperm cells.
**Question:** When pregnancy is not achieved following ovulation the uterus produces a hormone which destroys the Corpus Luteum. What is this hormone?

**Answer:** Prostoglandin

**Question:** Name three visual conditions of cows that should be used to cull cows?

**Answer:** Age of cow, udder characteristics, condition of teeth, feet, and legs.

**Question:** What is the most common method of branding?

**Answer:** Hot Iron

**Question:** The chains used to assist in pulling a calf are called?

**Answer:** Obstetrical chains.

**Question:** Which of the four compartments of the cow's stomach is referred to as the "true stomach"?

**Answer:** The Abomasum
<table>
<thead>
<tr>
<th>Question</th>
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<tbody>
<tr>
<td>Name the structure that develops on the ovary as the result of a ruptured follicle.</td>
<td>Corpus luteum</td>
</tr>
<tr>
<td>Which paspalum is the most widely adapted, productive, grows during cool weather, responds to fertilization and tolerates wet soils?</td>
<td>Dallisgrass</td>
</tr>
<tr>
<td>Before using any medicine there is one piece of information provided with the medication that should first be read. What should be read prior to use?</td>
<td>The medication label or medication insert.</td>
</tr>
<tr>
<td>Bacteria, Viruses, and Fungi are all categories of microorganism which pose potential health threats to cattle. To which of these categories can we attribute warts in cattle?</td>
<td>Virus</td>
</tr>
<tr>
<td>Describe the tool used to measure the height of cattle.</td>
<td>Consists of a cross-arm with a bubble level attached in a 90 degree angle to an upright containing a rule.</td>
</tr>
</tbody>
</table>
**Question:** After breeding, what is the earliest that an experienced palpater can detect pregnancy?

**Answer:** 30 - 35 Days

**Question:** The final expulsion of the fetal membranes after the calf is born refers to what stage of the calving process?

**Answer:** Membrane expulsion stage.

**Question:** What is the main source of energy in forages?

**Answer:** Cellulose

**Question:** Give the definition of "sweat" as it relates to hay production.

**Answer:** The practice of baling hay that is to "green". Thus causing an additional moisture loss.

**Question:** The majority (90%) of mature height is determined by what age?

**Answer:** 12 months

**Question:** At about 38 days into gestation the placental membranes begin to attach to the uterine wall. The placental side of these attachments are called what?
**Answer:** Cotyledons

**Question:** When evaluating sperm, what two things are you looking for?

**Answer:** Motility and normality

**Question:** Adequate levels of protein in the diet increases the immunity to Brown Stomach Worms resulting in what two effects?

**Answer:** Less damage to stomach linings, and reduced adult worm populations.

**Question:** Where do graders evaluate the amount and distribution of marbling?

**Answer:** Ribeye at the cut surface (between the 12th and 13th rib)

**Question:** What is the approximate size of a 120 day fetus?

**Answer:** 10 to 12 inches or the size of a small cat.

**Question:** What is the clinical term for prolonged or difficult labor due to heavy birth weight and/or small pelvic area of the dam?

**Answer:** Dystocia
**Question:** In natural beef cattle reproduction, where is the semen deposited?

**Answer:** The vagina

**Question:** In cattle, what do you call an intact male?

**Answer:** Bull

**Question:** To increase total lifetime productivity what is the recommended age to calve first time heifers?

**Answer:** 2 years

**Question:** How does Brucellosis infection normally occur?

**Answer:** Infection usually occur via the digestive tract, a susceptible animal may pick up the bacteria through the skin or eye, contaminated feed, bedding, water, or the premises.

**Question:** Name two of the major classes of plants found in rangelands.

**Answer:** Grasses, grass-like plants, forbs, and woody plants
**Question:** When utilizing body condition scores, cows should be sorted how many days prior to calving?

**Answer:** 90-100 Days

**Question:** Where does most of the microbial activity in the bovine digestive tract take place?

**Answer:** Reticulo-rumen or rumen

**Question:** If conception does not occur following ovulation the hormone prostoglandin is secreted to destroy the corpus luteum which is producing progesterone to maintain a pregnancy. What organ produces prostoglandin?

**Answer:** The uterus

**Question:** Cattle can be divided into two basic species, what are the two basic species?

**Answer:** Bos taurus and Bos indicus

**Question:** When developing mating plans, what are three factors to consider?

**Answer:** 1) Randomness; 2) Genetic relationship (pedigree); 3) Perofrmance or visual appearance (Phenotype)

**Question:** Which warm season grass is a hybrid with Johnson grass as a parent?

**Answer:** Sorghum alum
**Question:** What is the term for a treatment injected in the nose?

**Answer:** Intranasal

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**Question:** Cattle selected for the purpose of harvesting and consumption are generally referred to as Market Cattle. Cattle selected for the purpose of placing in a cattle herd for breeding are generally referred to as what?

**Answer:** Breeding Cattle

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**Question:** What does the body condition of cows at breeding affect?

**Answer:** Reproductive performance

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**Question:** The slaughter point on steers is generally reached at what age?

**Answer:** 14-20 months old

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**Question:** Name two anatomical areas on a cow that are used for scoring body condition?

**Answer:** Ribs, shoulder, hooks, pins, tail head, spinous processes, or transverse processes
### Question: IBR and BVD are caused by a virus or Bacteria?

**Answer:** Virus

### Question: How is carcass weight determined?

**Answer:** "Hot" taken on the dressing floor shortly after slaughter

### Question: Define cutability.

**Answer:** The percentage of lean red meat, as compared to carcass weight.

### Question: Name the four programs of the value added calf (VAC) vaccination management program?

**Answer:** Value Added Calf - 45 (VAC-45) Value Added Calf Prewean Plus (VAC Prewean Plus) Value Added Calf Prewean (VAC Prewean) Value added Calf-Procaine (VAC Precon)

### Question: What does hemorrhage mean?

**Answer:** Bleeding

### Question: When cows with a Body Condition Score of five or more still have reproductive problems, we would likely attribute these problems to?

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**Resource: Beef Quality and Yield Grading**

**Page:** 12   **Code:** 2173

**Resource: Cattle types and Breed Characteristics and uses L-5206**

**Page:**    **Code:** 2214

**Resource: Value Added Calf (VAC) - Vaccination Management Program**

**Page:** 1   **Code:** 2098

**Resource: Dehorning, Castrating, and Branding BCM-34**

**Page:** 2   **Code:** 4088

**Resource: Body Condition, Nutrition and Reproduction of Beef Cows B-1526**

**Page:** 9   **Code:** 2253
Answer: Mineral or vitamin deficiencies, disease, and or genetic problems. Any of these answers would be considered correct.

Released April 16, 2009

**Question:** The amount of sex drive expressed by a bull is described by what term?

**Answer:** Libido

Released April 16, 2009

**Question:** What are two gaseous by-products of the breakdown of carbohydrates by cattle?

**Answer:** Carbon dioxide and methane

Released April 16, 2009

**Question:** Which vaccination program has been shown to maximize the calf's preparedness to enter various marketing and production channels?

**Answer:** Value Added Calf-45 (VAC-45)