

2017 National Junior Limousin Show & Congress Quiz Bowl Study Guide

Limousin Information

History

- Country Limousin cattle originated from
- First Limousin bull imported to North America and when (*Prince Pompadour, 1968*)
- Know the names of the two bulls Bov Import imported in 1969 (*Dandy and Diplomate*)
- First Limousin bull imported permanently into the United States (*Kansas Colonel*), person who imported (*Bob Haag, Topeka KS*), when (*1971*)
- First French Limousin Herdbook established (*November 1886*)
- First registered Limousin cow (*NXF1 Miss Pompadour 1st*)

North American Limousin Foundation

- Year of Establishment (*1968*)
- Headquarters location (*Englewood, CO*)
- Board of Directors- who is on it and who the officers are
- MOE Shows- know what MOE stands for, name of all 6 Level I MOE shows and locations
- Official Publication (*Limousin Today*), editor (*Jennifer Scharpe*)
- Triple Crown- what shows make up Triple Crown, past winners
- First Executive Vice-President of NALF (*Richard "Dick" Goff*)
- Know past and current NALF Executives
- Founder Memberships- first founder member (*Robert Purdy*), how many sold, how much
- How many cattle NALF registered in 2016
- Know Regional Managers and what regions they represent
- Know Membership types and cost

North American Limousin Junior Association

- Year of establishment (*1973*)
- Board of Directors- know how many directors there are, who is on the board, what position they hold, what state they're from, who is running for the board in 2017
- National Junior Limousin Show & Congress- know where and when the first one took place, where next years will be
- Newsletter (*NALJA News*)
- Know membership fees

Limi Boosters

- Know original name and what year it was founded (*Limouselles, 1974*)
- What sponsorships and grants they sponsor at the National Junior Limousin Show & Congress and the history on those scholarships
- Know officers, what position they hold

Animal Science

General

- Beef Check-off program- know who runs it, how much is collected, how much is given to the Cattlemen's Beef Board
- Unites States Secretary of Agriculture (*George "Sonny" Perdue*)
- COOL (*Country of Origin Labeling*)- know what it is and how it started
- NCBA (*National Cattlemen's Beef Association*)- know what it is and why it's important
- USDA (*United States Department of Agriculture*)- know what it is and why it's important
- BIF (*Beef Improvement Federation*)- know what it is and when it started
- FSIS (*Food Safety and Inspection Service*)- know what it is and who runs it
- HACCP (*Hazard Analysis Critical Control Points*)- know what it is
- MARC (*Meat Animal Research Center*)- know what it is, when it was founded, current location
- NBAF (*National Bio and Agro-Defense Facility*)- know what it is, current location (*New York*), new location (*Manhattan, KS*), and when new location will be fully operable (*2023*)
- What country has the largest number of beef cattle? (*India*)
- Know your other British, Continental, and American Breeds
- Beef by-products
- What invention in 1873 had a large impact on beef cattle production? (*Barbed Wire*)
- Flight Zone- what is it?
- Chicago Mercantile Exchange- where most livestock futures are traded
- Know maximum age cattle can be exported to Japan
- Current International Letter Prefix (*E*)
- Know the safe minimum internal temperature of ground beef

Genetics

- EPDs (*Expected Progeny Differences*)- know which ones are considered maternal, paternal, and carcass related
- Know four factors used to determine an animal's EPDs (*its own data, parent's data, offspring data, genetic markers*)
- Polled vs. Horned- know which is dominant and which is recessive and the definitions of both
- Homozygous vs. Heterozygous genes
- Double Muscling- what is it?
- Know what percentages make a Purebred, Fullblood, and Lim-Flex
- Know what SNP stands for in regards to DNA (*Single Nucleotide Polymorphism*)
- Know genotype vs. phenotype
- Know what DNA stands for
- Know what protein is associated with the F94L gene in Limousin cattle (*Myostatin*)

Health

- Normal body temperature and normal pulse rate of a beef animal
- Scours- know what it is and the cause
- Bloat- what it is, how it can be detected, and how it can be treated
- Parasites- know all of the internal and external ones as well as how to treat them
- White Muscle Disease- how it is caused and treated
- Grass Tetany- how it is caused and treated
- Tetanus- how it is caused and treated. What is the common name for it? (*Lockjaw*)
- Pneumonia- how it is caused and treated
- Hardware Disease- how it is caused and treated
- BSE (*Bovine Spongiform Encephalopathy*)- what it is, how it is caused, and where confirmed cases have been found
- Brucellosis- what it is and what causes it
- Vibriosis- what it is and what causes it
- Trichomoniasis- what it is and what causes it
- Leptosprosis- what it is and what causes it
- Zoonotic Diseases- what are they?
- Blackleg- what it is and what causes it
- IBR (*Infectious Bovine Rhinotracheitis*)- what it is and what causes it, also known as Red Nose
- Ricketts- what it is and what causes it
- Fescue Toxicity- how is it caused and treated
- Scientific name for bovine pinkeye
- What PI3, BVD stands for
- Know the following genetic defects- curly calf syndrome, fawn calf, water head
- Know the difference between bacteria, viruses, and fungi

Classifications

- Scientific name for a cow (*Bovine*)
- Know both species of beef cattle and what makes them different (*Bos Taurus and Bos Indicus*)
- Term for a non-lactating cow (*Dry*)
- Offspring of a cow (*Progeny or calf*)
- Heifer that is born twin to a bull (*Free Martin*)
- Calves on grass after weaning but before going to feedlot (*Stockers*)
- Male parent (*Sire*)
- Female parent (*Dam*)
- Cattle used for milk and beef production (*Dual purpose breed*)

Anatomy

- The stomach- know all four compartments and what their purposes are
- Know names of the bones in beef cattle and where they can be found (*example-there are 13 pairs of ribs*)
- Know structure problems and terminology for them
- Rumen PH- what the average is in cattle and what upsets of it could cause
- Know the digestive system

Nutrition

- What is the most important nutrient for cattle? (*Water*)
- Know your common forages and feeds
- Know the 5 essential nutrients for cattle
- What is the most abundant mineral in any animal's body? (*Calcium*)
- Vitamins- water soluble, fat soluble
- Calorie- measure energy value in feed stuffs
- Know recommended Calcium to Phosphorus ratio in a balanced bovine diet (*2:1*)
- Know the symptoms of iodine deficiency
- Know what the following stands for and what they are- HDL (*High Density Lipids*), LDL (*Low Density Lipids*), RFI (*Residual Feed Intake*), TDN (*Total Digestible Nutrients*), VFA (*Volatile Fatty Acid*)
- Two possible active ingredients in stocker cattle growth implants other than what is used in calf growth implants (*Estradiol, trenbolone acetate (testosterone)*)
- Rumen Microbes- know what they are and what they do
- A cow's highest energy requirement (*2 months after calving*)

Carcass

- USDA Quality Grades (*Prime, Choice, Select, Standard, Commercial, Utility*)
- USDA Yield Grades (*1-5*)- know how they are calculated
- Veal- know definition
- Marbling- what it is and why it is important
- Know your cuts of beef
- Know the abnormalities in carcasses
- Know how to calculate dressing %, average dressing percentage
- Maturity grades- know what ages go with each grade
- Know what the following stands for and what they are- KPH, DFD, REA
- Meat is composed of 4 main elements- know which elements and quantities
- Fat thickness is measured between the 12th and 13th rib
- Common term for intermuscular fat
- Two major types of connective tissue found in beef muscle (*Collagen and Elastin*)
- Know the 3 major tissues in an animal's carcass
- Ultrasound scanning measures what carcass traits

Management

- Know the definition and process of weaning, dehorning, castrating methods
- Know the two permanent types of identification recognized by the AAA (*Tattooing and Branding*)
- Know how many days of age weaning weights for calves are adjusted for (205)
- When newborn calves should be weighed (*within 24 hours after birth*)
- Be able to define creep feeding
- Semen- how it is collected and stored
- CIDR- what is it used for and what hormone does it release?
- Know different types of grazing systems (*Example- rotational and continuous*)
- Body condition scores (1-9)
- Know when different types of needle gauges would be used
- Contemporary Groups- what are they and how are they used?
- Injections- know the types and where they are given
- Know weaning weight ratios
- Know calving ease codes and what they represent (*A, B, C, D, E*)
- For parent verification NALF uses SNP Markers- what does SNP stand for
- Different methods of cow identification (*ear tags, hot brands, freeze brands, tattoos, neck chains, brisket tags*)
- Know horned vs polled vs scurs
- Know what the following stands for and what they measure- ADG (*Average Daily Gain*), ACC (*Accuracy*)
- Know how scrotal circumference is measured
- How Frame Score is calculated (*Hip Height, Age, Sex*)
- Know makes up a Limousin tattoo (*Herd Prefix, Animal ID Number, Year of Birth*)
- Know the recommended linear feet of bunk space (*2-3 feet*) and resting area (*25 square feet*) a market beef animal needs

Reproduction

- Average length in days between heat cycles (*21 days*)
- Average length of a cow's estrous cycle (*21 days*)
- Average time span after calving before a cow comes into heat (*2 months*)
- Average gestation length (*283 days*)
- Sperm cell abnormalities (*Double heads, coiled tails, proximal droplets, distal droplet*)
- Cow's first milk and what makes it different from regular milk
- A.I. (*Artificial Insemination*)
- E.T. (*Embryo Transfer*)
- Know the reproduction tracts in both cows and bulls
- Zygote- know what it is and how it is formed
- Cryptorchid- what it is
- Surrogate mother in embryo program (*Recipient Cow*)

- Dystocia- what is it?
- Lutalyse- what it is and why you would use it
- Clean up bull- what does he do?
- Parturition- what does it refer to?
- Know all of your main hormones
- Flehming Response- what is it
- Breeding soundness exams (BSE) - what is their purpose and how are they conducted?
- Time between the birth of a calf and when the cow rebreeds (*Post-Partum Interval*)
- Time between when a cow is bred and when she calves (*Gestation*)
- FSH (*Follicle Stimulating Hormone*)- what is it
- Breech Birth- what is it
- Scientific name for afterbirth (*Placenta*)
- Method is commonly used to determine pregnancy in cows (*Rectal palpation*)