BEEF 1 – Bite into Beef

BEEF 1 – QUIZ BOWL QUESTIONS

1. What beef breed was developed at the King Ranch in Texas?
   Sante Gertrudas

2. What solid black polled breed originated in Scotland
   Angus – weights bull 1,600 – 2,000  Cow – 1,000 – 1,400

3. What is the middle joint of the rear leg of a calf called?
   Hock

4. Where are the pin bones located?
   Bone by Tailhead

5. What is an example of a comparative judging term describing the finish of a steer?
   Cleaner, trimmer, more optimally conditioned, longer bodied, more extended – page 11

6. When should you start halter breaking a calf?
   Several months before the show when they are still calves

7. What are four pieces of equipment used to fit a steer?
   Adhesive, scotch comb, flathead clippers, sheep head clippers, spray bottle, blower

8. How do you set up the legs of a beef animal when showing?
   The legs need to be square under the animals body.

9. What approximately percent crude protein should growing cattle be fed?
   12 – 16%

10. What are three signs of a sick calf?
    humped back, snotty nose, yellow runny feces, slow moving, doesn’t come to feeder

11. What are three examples of feed ingredients used as protein sources in a ration?
    Cottonseed meal, soybean meal, distillers grain, brewers grain, corn gluten meal, urea

12. What do feed ingredients like hay, barley and oats supply in a ration?
    Energy

13. What is the name of the bone found in a chuck roast?
    Blade and arm bone

14. What are the names of three retail cuts of beef?
    Round steak, rib eye roast, arm pot roast, t-bone steak, skirt steak, brisket, sirloin steak
    short ribs, back ribs, chuck eye roast.

15. What is a bovine male called?
    Bull

IDENTIFYING BEEF BREEDS – Page 6-7
1. **Name the white faced, red cattle that have horned or polled bloodlines.**  
   Hereford – 2nd most numerous breed in US  
   Originated in England
2. **What breed of cattle were originally called Durhorns and this British breed is red, white or roan in color?**  
   Shorthorn – Originally British breed
3. **What large cattle breed originated in the French Maine and Anjou river valleys?**  
   Maine – Anjou
4. **Which large muscled, red to gold breed originated in the French regions of Limousin and Marche?**  
   Limousin  
   **Weights** – Bull 2000 – 2200  
   Cow 1200 – 1400
5. **Which breed of cattle has a solid frame, is solid white and know for their fast growth rates?**  
   Charolais – French Breed
6. **Name this breed that is white faced, red or yellow from the Simme Valley in Switzerland.**  
   Simmental  
   **Weights** – Bull 2300 – 2400  
   Cow 1600 – 1700
7. **Name this cherry red colored breed from the French Salers Valley.**  
   Salers  
   **Weights** – Bull 2400 – 2600  
   Cow 1400 – 1600
8. **What cattle breed was developed in the wild in dry, harsh conditions which they have to constantly worry about predators?**  
   Their most important traits are calving ease, hardness, good feet and legs and speed.  
   Texas Longhorn
9. **What cattle breed is the largest cattle breed in the world that was developed as a draft animal?**  
   Piedmontese
10. **What cattle breed was developed in Scotland’s cold, rocky, harsh environment and it’s most important traits are small frame size, calving ease, and cold weather tolerance?**  
    Highland
11. **What cattle breed was developed as a pure meat animal to produce the largest possible cuts of meat?**  
    Chianina  
    **Weights** – Bull 3500 – 4000  
    Cow 2000 – 2400
12. **What cattle breed was developed as a draft & Milk breed which is known for its strong feet and legs, large capacity and milking ability?**  
    Fleckvieh
13. **What cattle breed was developed in a not environment and has important traits of disease resistance, teat tolerance and hardiness?**  
    Brahman

**BEEF CATTLE PARTS – Page 8**

1. **Area along the tope from the point of shoulders to the last rib.**  
   Back or top
2. **What is the chest of the calf called?**  
   Brisket

3. **What is the bone called from knee to pastern and from hock to pastern?**  
   Cannon Bone

4. **Where is the dewlap located?**  
   Back of hoof.

5. **What is the dewlap?**  
   Flap of skin on the throat.

6. **What joint is in the front legs at the fore flank region?**  
   Elbow

7. **What area is from knee to elbow of the front leg?**  
   Fore leg

8. **Where is the fore rib?**  
   Right behind the shoulder

9. **Where is the rear flank?**  
   In front of the rear leg

10. **What is the middle joint of the rear leg?**  
    Hock

11. **Where does the line tie into the hip?**  
    Hook or hip bone

12. **Where is the loin muscle?**  
    From the last rib to the start of the hip

13. **What is the area along the belly line behind the front legs?**  
    Lower fore rib (Heart Girth)

14. **What is the pastern?**  
    Joint right above the hoof

15. **What is the pin bone?**  
    Bone by the tail head

16. **What is the poll?**  
    Top point of the head

17. **What is the area where front legs meet along the top line?**  
    Point of shoulder

18. **What is the stifle?**  
    A muscle at rear flank

19. **What is the tail head?**  
    Where tail attaches to animal

20. **Where is the cod?**  
    Between the rear legs of a steer

**FITTING AND SHOWING** – page 12 – 13
1. For the proper fit of a halter on cattle where should the nose piece be?  
   Up on the nose just under the eyes

2. Why would allowing the animal to drag a dead rope on the ground help break a calf to lead?  
   Teach the calf to respond to pressure
3. **Name one thing not to do when breaking a calf to lead:**
   - Tie calf behind a vehicle and pull,
   - Hit the calf with a stick or whip,
   - Pull on the halter with hard jerks,
   - Use an electric prod.

**MANAGEMENT & HEALTH PRACTICES – pages 19, 20, 23**

1. **About what % of water will a calf drink of its body weight in cold weather?**
   - 8%
   - and in hot weather?
   - 19%

2. **About how many pounds of dry feed do you need to feed to beef steers for every 100 pounds of body weight each day?**
   - 2.5 lbs.

3. **How often should you at least check for injuries, sickness, unusual things or changes in behavior?**
   - Daily to twice a day.

4. **Why should you bush cattle?**
   - To calm them and clean, and train hair.

**Page 20**

1. **What is a syringe for?**
   - Administering medicine or vaccines i.e. IM, IV or SQ

2. **What are ear tags for?**
   - Identifying cattle

3. **Name 3 ways of castrating:**
   - Banding, cutting, and buriduzzo

4. **What would be used to administer colostrum or fluids to a weak newborn calf?**
   - Calf feeder bag

**Page 23**

1. **Name 3 of the five basic nutrients?**
   - Protein, energy, minerals, vitamins, water

2. **What is excess energy stored as?**
   - Fat

3. **What nutrient provides supplies for making body tissues like muscle, bones, blood, skin?**
   - Fat

4. **What is the most important nutrient?**
   - Water

5. **A 500 lb. calf will drink how much water?**
   - 5-12 gallons
   - 750 lb calf?
   - 7-18 gallons
1,000 lbs calf?
10-24 gallons

6. **Name two forage products used in a beef cattle ration:**
   Alfalfa, hay, ground alfalfa, leaf meal, ground grass

7. **Name two roughage products used in a beef cattle ration:**
   beet pulp, cottonseed hulls, oat hulls, straw ground

**BEEF PRODUCTS – Page 24**

1. **Where does the Retail Cut _______ come from in the wholesale cut?**
   Round steak – Round
   Rib Eye roast – Rib
   Arm Pot Roast – Chuck
   T-bone steak – Short loin & sirloin
   Skirt steak – Short Plate
   Brisket – Fore shank and Brisket
   Sirloin Steak – Short loin & sirloin
   Short ribs – Chuck and Short Plate
   Back Ribs – Rib
   Chuck eye roast – Chuck

Page 27

1. **What types of beef cuts are best suited to dry heat methods such as grilling, stir-frying, roasting or broiling?**
   Tender cuts

2. **What types of beef cuts are best suited to moist heat methods such as braising or simmering?**
   Less tender cuts

Page 29

1. **What is live quality grade based on?**
   Evaluation of fatness on an animal (conditioning)

2. **What is carcass quality grade based on?**
   Evaluation of degree of marbling and degree of maturity

3. **Name 3 of the 5 quality grades for young cattle:**
   Prime, Choice, Select, Standard, Utility

**BEEF TALK 1**

1. **What is backfat?**
   Amount of fat over the animal’s back,

2. **Where is backfat measured?**
   usually measured between the 12th and 13th rib

3. **What are by-products?**
   Products made by further processing of leftovers after the primary

4. **What is the term used to describe the # of % of calves produced within a herd in a given year relative to the # of cows & heifers in the breeding herd?**
   Calf crop
5. **What is parturition?**
   Giving birth

6. **What is the first mile given by a female following delivery of her calf, which is high in antibodies that protect the calf from invading microorganisms?**
   Colostrum

7. **What is concentrate?**
   Feed high in energy, highly digestible and low in fiber

8. **What is a crossbred?**
   Animal produced by crossing 2 or more breeds

9. **What is the bolus of feed that cattle regurgitate for further chewing?**
   Cud

10. **What is culling?**
    Removing an animal from a herd due to poor production, type, or health

11. **What is a dam?**
    A female parent

12. **What is dual purpose?**
    Animal used for both meat and milk

13. **What are cattle that need further feeding for the period from weaning to finish prior to slaughter?**
    Feeder cattle

14. **An animal that doesn’t have horns because of its genetic traits is called what?**
    Polled

15. **What is a male parent called?**
    Sire

16. **What is a steer?**
    Bovine male castrated before puberty

17. **What are the first cuts that a beef carcass is broken into?**
    Primal Cuts

18. **What are cuts of beef in sizes that are purchased by the consumer?**
    Retail Cuts

19. **What is a purebred?**
    Animal eligible for registry with a recognized breed association.

20. **What are steers or heifer calves run on grass before going to feed lot?**
    Stockers

**BEEF 2 – Here’s the Beef**

**BEEF 2 – QUIZ BOWL QUESTIONS**

1. **What is a good example of ideal feet and legs on a beef animal?**
   Correct set of rear and front legs with rear legs set far apart. Legs should appear straight, slightly hocked when viewed from rear. Front legs should not be knock kneed or bowlegged when viewed from the front.
2. **How does feed move through a ruminant’s digestive system?**
   Esophagus, Rumen, Reticulum, Omasum and Abomasum then small intestines, large intestines

3. **How do microbes (bugs) in the rumen help digest feed?**
   Digest low-quality feces that other animals can not
   Digest large amounts of grass and hay – use many types of feeds

4. **What type of feed ingredients in the ration are required for good skeletal growth in beef animals?**
   Calcium

5. **What insect attaches itself to the skin and sucks blood from its host?**
   Lice

6. **What’s another name for buffalo gnats?**
   Black Flies

7. **What is a good electronic source of beef project information?**
   [http://www.ag.ohio-state.edu](http://www.ag.ohio-state.edu) Ohio State

8. **How should the hair be clipped on a show steer’s legs?**
   Four areas of the leg will be short; the back of the hock bone, the front of the hind leg below the flank, the inside of the hock and the front of the pastern or knuckle

9. **What does it mean to practice ethical behavior in the beef project?**
   Wrongly tampering with the animal’s nature (ie. color, size or use of injections.)

10. **How is yield grade determined?**
    Yield grade is based upon the yield of boneless, closely trimmed retail cuts from the round, liver, rib and chuck, is referred to as “carcass cutability”

**FEEDING, MANAGEMENT AND HEALTH PRACTICES**

**Page 11**

1. **What part of the digestive system functions as a storage area for food and aids in the breakdown of coarse particles through bacterial action?**
   Rumen

2. **What part of the digestive system has honeycomb-like walls retain foreign materials that could injure the digestive system?**
   Reticulum

3. **What part of the digestive system removes liquid from the feed by muscle contractions and breaks up coarse particles in feed?**
   Omasum

4. **Which stomach compartment is the “True Stomach?”**
   Abomasum digestive juices break down food. Juices include hydrocholoric acid, pepsin, renin and lipase.

**Page 15**

1. **What is a flight zone?**
   An animal’s own space in which it doesn’t want any people or foreign objects.

2. True or False – Cattle are herd animals. They handle much easier by themselves.

3. True or False – Moving objects distract cattle.
4. **True** or False – Livestock have wide angle vision. They see almost except what is directly behind them.

**Page 18 & 19**

1. THESE SYMPTOMS DESCRIBE WHAT PARASITE IN BEEF CATTLE:
   - Diarrhea, blood in urine and fever, losing weigh, poor appetite.
   - Worms
   - Scratching or rubbing, Loss of blood, loss of hair, weight loss
   - Lice
   - Back of animal looks like marbles under hide.
   - Grubs

**BEEF PRODUCTS**

**Page 28 & 29**

1. What grade identifies cattle for differences in yields of boneless, closely trimmed retail cuts from the round, line, rib and chuck?
   - Yield Grade

2. What is another name for yield grade?
   - Cutability

**Page 30 & 31**

1. What 2 grades are used to calculate carcass values?
   - Yield Grade & Quality Grade

**BEEF TALK 2**

1. What is the adjusted weaning weight?
   - Weight of a calf at weaning, adjusted to a standard 205 day weight.

2. What is a sterile bovine female?
   - Freemartin

3. What is the calf weight taken at birth?
   - Birth weight

4. What disorder is characterized by gas distention in the rumen seen on the animal’s left-side?
   - Bloat

5. What is a male bovine with un-descended testes?
   - Cryptorchid

6. What are fed cattle whose time in the feedlot is completed and are now ready for slaughter?
   - Finished cattle

7. What nutritional ailment is due to overeating and causes animals to go lame with sore front feet and excessive hoof growth?
   - Founder
8. **What disorder is magnesium deficiency in grazing cattle?**
   Grassy Tetany

9. **What term refers to the amount of muscle an animal has?**
   Leanness

10. **What term is used to describe the small flecks of fat within a muscle?**
    Marbling

11. **What is palatability?**
    The degree to which a feed is liked or accepted by an animal

12. **What term is used to describe the measurement in square inches of a cross section of the loin muscle taken at the 12th rib?**
    Rib Eye Area

13. **What are the internal organs & cavities of an animal called?**
    Viscera

**BEEF 3 – LEADING THE CHARGE**

**QUIZ BOWL QUESTIONS**

1. **How is the frame score of a steer determined?**
   Determine hip height, know age of animal, use frame score table to determine animal’s frame score.

2. **What does EPD stand for when selecting cattle?**
   Expected Progeny Differences

3. **What is something that effects the quality of hay?**
   Fertilizers, age or stage of maturity, how well it is dried after being cut, storage and handling

4. **What is the crude protein content of corn grain?**
   9.8%

5. **What are 3 careers related to the beef industry?**
   Cow/Calf Rancher
   College researcher/teacher
   Feeder cattle buyer
   Breed Representative
   Extension/Consultant

6. **What is a symptom of a beef animal with laminitis?**
   Lameness in cattle where lamina hoof wall and sole become very sore, overgrown and malformed hooves often result.

7. **What is a name of a contagious skin disease of cattle?**
   Warts, ringworm

8. **What are the names of 3 parts of a beef cow’s reproductive tract?**
   Vulva, vagina, cervix, uterus, uterine horn, oviduct, ovaries

9. **What are three things that should be considered when selecting a beef sire?**
   Birth weight, weaning weight, yearling weight, maternal milk, marbling

10. **How many days does a cow’s estrous cycle?**
    21 days
11. **What does the term “cutability” refer to when evaluating a beef carcass?**
   Refers to the proportion of the carcass that is saleable as trimmed (boned or partially boned) retail cuts.

12. **What does it mean to “hedge risk”?**
   Hedging – risk management strategy that allows a producer to lock in a price for a given commodity at a specified time.

**SELECTION AND JUDGING**

Page 11

Name 3 EPD’s that are posted on a SIRE SUMMARY or SIRE EVALUATION?
   Birth weight, weaning weight, yearling weight, maternal milk, marbling, etc.

**FEEDS, FEEDING AND CAREERS**

Page 17

What are 4 key items that must be on a feed label?
   Net weight, product name & brand name, drug additives, guaranteed analysis of the feed, directions for use, and cautionary statements.

**HEALTH AND REPRODUCTION**

Page 21

What is the disease name for a contagious skin disease of cattle that are 1 to 2 inches in diameter where hair is lost and a slightly raised crustiness appears? It is caused by a fungus.
   Ringworm

Page 23

Name 3 parts of a bull’s reproductive tract?
   Epididymis, penis, retractor penis muscle, scrotum, sheath, sigmoid flexure, and testicles

Page 25

1. **What is fertilization?**
   The union of sperm from the male with an ovum from the female

2. **What is ovulation?**
   The release of an ovum from the follicle on the ovary.

3. **About how long is gestation in beef cattle?**
   285 days

4. **What reproduction tool manipulates reproductive processes so that female cattle will come into heat at a predicted time range?**
   Estrous Synchronization

5. **What does A.I. stand for?**
   Artificial Insemination

Page 27
What is a way to check that a cow is pregnant?

Rectal palpation, ultrasound

Page 29

1. **What are the 3 stages of parturition?**
   - **Stage 1:** Uterine muscle contracts, cervix dilates
   - **Stage 2:** Begins with the emergence of the feet or the water sac and eventually the calf moves from the uterus, through the cervix and through the birth canal.
   - **Stage 3:** The fetal membranes are passed.

2. **Describe 3 presentations that are difficult to deliver when a cow is calving:**
   - Head back, one leg back, upside down, or crosswise, both front legs back, backwards

3. **What is the safest way to remove a calf that is too large?**
   - Cesarean Section

**MEATS AND MARKETING**

Page 31

1. **What are 3 parameters that are considered when evaluating a carcass for muscling?**
   - Length, width, thickness, bulge, and plumpness of the round, width & fullness through the sirloin and short loin, size of the rib eye, width of the rib and muscle development in the chuck.

2. **What are 3 quality attributes to be considered in grading quality?**
   - Maturity, marbling, firmness of the lean, texture of the lean, and lean and fat color.

3. **Why is marbling important to a piece of meat?**
   - Important for flavor and it influences juiciness.

**BEEF TALK 3**

1. **What is the procedure called where semen is manually placed into the reproductive tract of the female with the purpose of getting a pregnancy?**
   - Artificial Insemination

2. **Line breeding or inbreeding, mating of related animals is also called?**
   - Close breeding

3. **What is the term used to refer to a disease that can be readily transmitted from one animal to another?**
   - Contagious

4. **What is another name for ‘heat’?**
   - Estrus

5. **What is the term used to refer to the amount of feed it takes to gain one pound of weight?**
   - Feed efficiency
6. **What is the ability of an animal to reproduce called?**
   Fertility

7. **What is the market price?**
   The price paid by the packer for cattle.