

Madison County Fair Association
Penned Heifers
Interview Study Guide

The answers provided may not be the only correct responses. Justifying and expanding on your answers is encouraged.

1. What is the gestation period of cattle?

280-283 days

2. After the calf is born, how many days does it take for milk production to reach its highest levels?

approximately 35 days

3. What is the most common limiting factor in milk production?

lack of energy

4. What is the length of the estrous cycle?

21 days

5. What is the duration of the heat period?

18-24 hours

6. What is the time of ovulation?

6-12 hours after the end of heat

7. The udder has how many compartments?

four quarters

8. How often should cattle be dewormed?

twice per year

9. What problem can brucellosis (Bang's Disease) cause in cattle?

abortion

10. What body score should cattle be in to breed efficiently?

body score of five to seven

11. Where did you purchase your heifers?

12. What breed are your heifers?

13. What characteristics are unique to this breed?

14. Based on the breed characteristics of your heifers, what are you looking for in a bull to sire your calf crop?

15. What qualities are important when looking for a bull to breed to heifers?

low birth weight, high weaning weight

16. What does “LBW” mean?

low birth weight

17. What are the benefits of using a bull with low birth weight or LBWs?

easier calving, less calving problems

18. What does “EPD” mean?

expected progeny differences

19. What EPDs do you look for in heifers?

high milk production, low birth weight, high weaning weight

20. Where do you find the EPDs for a particular heifer?

by studying the sire and dam information

21. Why do your heifers need to have roughage in their diets?

Roughage is the main source of food for cattle and it keeps their stomach working.

22. Name three sources of roughage.

hay, grass, cottonseed hulls

23. Name three sources of protein.

cottonseed meal, soybean meal, fish meal, feather meal, etc.

24. Have you enjoyed this project?

25. Should you try to establish a set breeding and calving time with your herd?

26. What are some advantages of a fall calving season?

typically calves will sell at a heavier weight and wean earlier, therefore giving cows time to recuperate before calving again

27. What are some advantages of a spring calving season?

green grass is growing, you do not have to feed a cow with a calf throughout the winter

28. What is the most popular calving seasoning in Madison County?

spring

29. Why is the weaning weight EPD so important?

when we sell calves, we sell pounds

30. Name four of the seven reproductive pathogens that cause the most concern.

1. brucella abortus
2. leptospira hardjo-bovis
3. campylobacter fetus
4. infectious bovine rhinotracheitis (IBR) virus
5. bovine viral diarrhea (BVD) virus
6. tritrichomonas foetus
7. neospora caninum

31. Reproductive diseases are the greatest disease threats to the _____ and _____ of beef cow herds.

production and profitability

32. Where is the best place on cattle to give injections?

in the neck

33. What is dystocia?

slow and/or difficult delivery during birth

34. How many cows can a mature bull service?

20-40 head

35. What is artificial insemination?

the introduction of semen into the uterus by other than natural means

36. What is an F1?

the first cross between two different breeds

37. At what age do heifers become sexually mature?

8-12 months depending on the breed

38. At what age are most calves weaned?

5-7 months

39. What are the benefits of early weaning?

allows the cow to get back in better body condition

40. Why would someone creep feed calves on first calf heifers?

to help ensure a heavier calf at weaning because heifers tend to wean a lighter calf

41. At time of calving, what is the ideal body condition score for a heifer?

seven

42. What is the body condition scoring system?

A body condition score is determined by the amount of body fat or lack of body fat and is expressed numerically. Beef cattle and horses are on a 1-9 scale with one being emaciated (very thin) and nine being very obese (fat). Pigs, sheep, goats and dairy cows are based on a 1-5 scale with one being very thin and five being overly fat.

43. What is the most important mineral for reproduction?

phosphorus

44. What is a terminal cross?

offspring are designated for slaughter

45. Is nutrition for the cow more important at calving or weaning?

calving

46. Does forage quality affect the amount of supplementation?

yes

47. What are the three stages of forage quality?

1. lush
2. transitional
3. poor

48. What is the rumen?

the large first compartment of the stomach of a ruminant

49. What is bloat?

the build up and inability to expel gas in the rumen

50. What is the target breeding age of heifers?

14-16 months

51. What is the common practice of determining pregnancy in cattle?

palpation

52. What are the common reproductive diseases in cattle?

brucellosis, leptospirosis, vibriosis, IBR and BVD complex, trichomoniasis

53. When selecting a bull to breed heifers what EPDs should a producer consider?

birth weight and calving ease

54. What functional traits are important when selecting replacement heifers?

structural soundness, frame size, fleshing ability, adaptable to local environment, disposition/temperament

55. Why is nutrition important before breeding season?

growing and sexual maturity

56. Why is a heifer's body condition important before and after calving?

milk production, healthy calf, ability to re-breed

57. What is brucellosis (Bang's Disease) and how does it affect cattle? Can humans contract brucellosis? If so, what is the name of the disease?

Brucellosis is a contagious disease that is localized in the reproductive organs and udder. Bacteria are shed in milk, aborted fetuses, after birth and other reproductive tracts. In humans, brucellosis is called Undulant Fever.

58. Should growth implants be given to replacement heifers? Why or why not?

Implants are not recommended for use in replacement heifers. Typically, implants are given to animals intended for slaughter and used to enhance skeletal and muscular growth.

59. At what age do heifers normally begin their estrus cycle in order to breed?

8-12 months depending on the breed and body condition

60. Typically, how old are heifers when they have their first calf?

two years old

61. Should replacement heifers consume a high energy based diet? Why or why not?

62. When breeding first calf heifers, what characteristics are important in choosing a bull?

low birth weight

63. What is the breed type of your heifers? What is the breeding of their sires and dams?

64. Are there any hormones that can be given to help control timing of the estrous cycle?

yes

65. What is the Beef Check-off program and its intended purpose?

The Beef Check-off program is a national marketing and research program designed to increase the demand for beef at home and abroad.

66. Name two pieces of equipment needed to palpate a cow?

protective plastic sleeve, lubricant, chute

67. Name two things a breeding soundness examination includes?

physical examination, internal and external examination of the reproductive tract, semen evaluation

68. A producer weaned all of his calves when they were seven months old. He has 100 cows and they all calved. At weaning, he weaned 94 calves. What is the producer's calf crop percentage?

(# of calves weaned/# of cows exposed) X 100 = calf crop percentage

(94/100) X 100 = 94%

69. How does body condition affect cattle at the time of breeding?

reproductive performance

70. What is the term for the progeny of crossbreeding two purebreds?

F1

71. The continental breeds of cattle were developed on what continent?

Europe

72. Name two anatomical areas on an animal that are used for scoring body condition?

ribs, shoulder, hooks, pins, tail head, spinous processes, transverse processes

73. Is there a vaccination for brucellosis (Bang's Disease)? If so, at what age do you vaccinate?

Yes, there is a vaccination. It is recommended that all replacement heifers are vaccinated between four and 12 months of age.

74. What is the hormone responsible for maintaining pregnancy in cattle?

progesterone

75. What is semen analyzed for when a bull is fertility tested?

motility and morphology

76. Between starter, grower and finisher rations, which would be described as being the lowest in energy content?

starter

77. When utilizing body condition scores, cows should be sorted how many days prior to calving?

90-100 days

78. What is the lowest body condition score a cow should have to ensure high pregnancy rates.

five

79. In a grazing situation, how much forage will a cow consume in a day?

2.0 to 3.0 percent of her body weight based on the quality of the forage

80. What is the formula for average daily gain (ADG)?

weight gained (ending weight - starting weight)/days on feed = ADG

81. In the female reproductive tract, what is the name of the "Y" shaped organ with two "horns?"

uterus

82. When does the greatest possible loss to hay quality in hay production occur?

The greatest possible loss to hay quality in hay production occurs when it is harvested past ideal maturity which is typically 28-35 days.

83. 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?

palpation

84. What is the basic classification for the non-humped cattle?

bos taurus

85. What piece of information should be read prior to using any medication.

the medication label

86. What are two visual conditions of cows that should be used to cull?

age of cow, udder characteristics, condition of teeth, feet and legs

87. Between pasture and range which provides more forage production per acre?

pasture

88. Commercial feed law requires each bag or bulk load be accompanied by a label with seven items of information. What are three of the seven items?

1. net weight
2. product name and brand name
3. drug additives
4. guaranteed analysis of seed
5. common and usual name
6. directions for use
7. principal mailing address of the manufacturer

89. What is the maximum amount of vaccine or medications that should be injected in any one injection site?

10 cc

90. What body condition score or BCS represents a very thin cow?

BCS: 1

91. Most reproductive failures in the beef female can be attributed to what variables?

improper nutrition and thin body condition

92. 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 _____?

breeding cattle

93. What units of measurement are used when injecting vaccines?

milliliters (mL) or CCs

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

trace minerals

95. What is the basic classification of the humped or zebu cattle?

bos indicus

96. Cattle breeds are divided into which two basic classifications?

bos indicus and bos taurus