

## **Beef Skillathon Study Series: Breeds**

### **Supplemental Activities**

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The below activities are designed as supplemental activities to the Breeds video that is part of the Beef Skillathon Study Series located at <https://animalscience.tennessee.edu/youth-resources/>. Youth should watch the video and then complete these activities. Keys for all activities are provided at the end of this packet.

### **Flashcards**

Digital flashcards are available at [https://quizlet.com/\\_8foncy?x1jqt&i=1i1f80](https://quizlet.com/_8foncy?x1jqt&i=1i1f80). Index cards and #8163 mailing labels are needed to construct flashcards for the below activities.

### **Beef Breed Concentration Game**

1. Print breed pictures and names (pages 2-4 of this packet) using #8163 mailing labels.
2. Peel off each sticker and place on a separate index card (26 index cards needed).
3. Shuffle all of the cards up and place them face down.
4. Flip over 2 cards.
5. If the 2 cards match (correct breed name with picture) keep them.
6. If the 2 cards do not match (2 pictures, 2 breed names or the wrong breed name and picture combination) place them back down and try again.
7. Keep going until all pictures are correctly identified with their names.

### **Beef Breed Flashcards**

1. Print breed pictures, names and descriptions (pages 2-6 of this packet) using #8163 mailing labels.
2. Place the correct breed picture and breed name on the front and back of the same index card to make traditional flash cards (13 index cards needed). These cards will not work to play the concentration game.
3. Place the breed description on index cards (13 index cards needed).
4. Practice with flashcards to learn about beef breeds.

### **Crossword Puzzle**

Print Activity 2: Beef Breed Crossword Puzzle to complete the activity by filling in the breed using the correct corresponding description.

### **Beef Breed Selection Scenarios**

Read the scenarios in Activity 3: Beef Breed Selection. Choose the best breed(s) that fits the given scenario and then explain the chosen breed(s).

ANGUS



HEREFORD



RED ANGUS



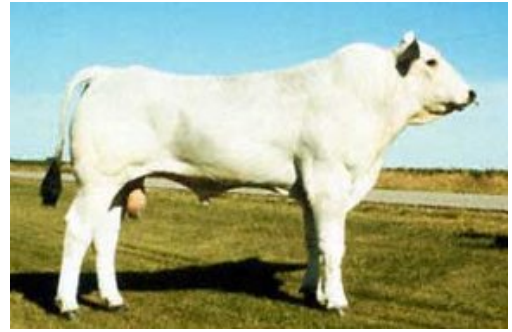
SHORTHORN



CHAROLAIS



CHIANINA



GELBVIEH



LIMOUSIN



MAINE-ANJOU



SIMMENTAL



BRAHMAN



BRANGUS



SANTA GERTRUDIS



- From Scotland
- Black and polled
- Maternal breed, also known for excellent growth and carcass traits
- Imported to US in 1873

- From England
- Red with white face
- Horned or Polled
- Maternal breed, known as very hearty breed
- Introduced in US in 1817

- From Scotland
- Red and polled
- Maternal breed with good terminal performance

- From England
- Red, white or roan
- Can be horned or polled
- Maternal breed, very popular in show-ring and club calf industry
- Introduced in US in 1783

- From France
- White and can be horned or polled
- Terminal breed known for muscle and growth
- First brought to US in 1934

- From Italy
- White with black points
- Known for size and growth and being the tallest breed
- Very popular in cross-breeding programs within the club calf industry
- Introduced to US via artificial insemination

- From Germany
- Red or black and can be horned or polled
- Originally selected as a dual-purpose breed, now known for good growth and excellent maternal traits
- Imported to US in 1971 by importation of semen

- From France
- Red or black and can be horned or polled
- Terminal breed known for muscle, leanness and high yielding carcass
- Imported to US in 1971

- From France
- Originally red with white markings, now can be red or black
- Known for muscle
- Very popular in cross-breeding programs within the club calf industry
- Introduced to US via artificial insemination

- From Switzerland
- Originally red and white color pattern, now can be black or red
- Can be horned or polled
- Originally selected as a dual-purpose breed, now known for excellent growth and one of the heaviest milking of terminal breeds
- Introduced in US in late 1800s but did not last, reintroduced in late 1960s

- From India
- Light gray or red to almost black and horned
- Characterized by large hump and abundance of loose skin
- Basis for the American breeds
- Known for heat tolerance and adaptability

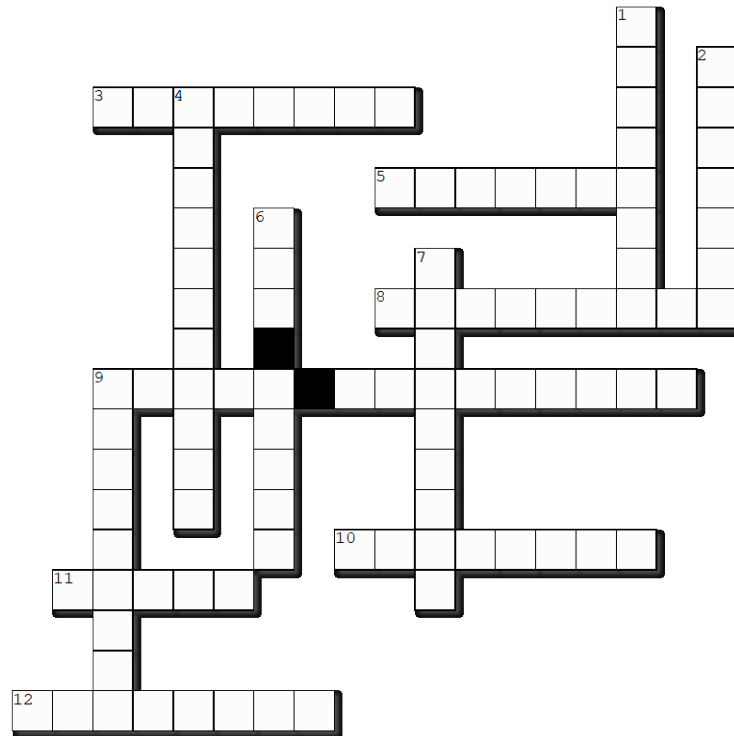
- Black and polled
- Crossbreed consisting of 3/8 Brahman and 5/8 Angus
- Bred for heat tolerance of Brahman and maternal/carcass traits of Angus
- Development began around 1912 in Louisiana

- Red and horned
- Crossbreed consisting of 3/8 Brahman and 5/8 Shorthorn
- Bred for heat tolerance of Brahman and maternal traits of Shorthorn
- Developed at King Ranch in Texas
- First official breed developed in US

## Activity 2: Beef Breed Crossword Puzzle

### Beef Breeds

Use the descriptions as clues to fill in the crossword puzzle with the correct beef breed names.



Created using the Crossword Maker on TheTeachersCorner.net

#### Across

3. From France, red or black, horned or polled, known for muscle leanness and high yielding carcass, came to U.S. in 1971
5. From India, light gray or red to almost black, horned, large hump, loose skin, known for heat tolerance and adaptability
8. From France, white, can be horned or polled, terminal breed known for muscle and growth, brought to U.S. in 1934
9. Red and horned, 3/8 Brahman 5/8 Shorthorn, developed at King Ranch TX, first official breed developed in U.S.
10. From England, red with white face, horned and polled varieties, known as a very hearty breed, introduced to U.S. in 1817
11. From Scotland, black and polled, maternal breed also known for excellent growth and carcass traits, imported to U.S. in 1873
12. From Germany, red or black, horned or polled, dual purpose breed, introduced to U.S. in 1971 by importation of semen

#### Down

1. From Italy, white with black points, tallest breed, popular in cross-breeding programs within club calf industry
2. Black and polled, 3/8 Brahman 5/8 Angus, bred for heat tolerance of Brahman and maternal/carcass traits of Angus
4. From France, originally red with white markings but can now be red or black, known for muscle, popular in cross breeding
6. From Scotland, red and polled, maternal breed with good terminal performance
7. From England, red white or roan, horned or polled, popular in show ring and club calf industry, introduced to U.S. in 1783
9. From Switzerland, originally red and white but can now be red or black, horned or polled, heavy milking terminal breed



### Activity 3: Beef Breed Selection Scenarios

1. You have a small herd of Angus and Hereford commercial cows and you would like to increase the growth and muscle of your steers by breeding the cows to a different breed. What breed would you choose and why?
2. You have a small herd of Hereford cows and have recently started selling market ready steers direct to friends and family for meat. Most have reported back to you that they would prefer higher quality beef with more marbling. Which breed would you choose to breed to your Hereford cows and why?
3. What two terminal breeds would you choose if you wanted to develop commercial heifers to sell to others beef producers in your area that were known for good mothering and milking ability, fast growth and muscle? Explain your answer.
4. What two breeds (maternal or terminal) would you choose if you wanted to develop commercial heifers known for good maternal traits and growth as well as steer calves that were known for high performance and producing high quality beef? Explain your answer.
5. You have a small herd of Red Angus cows and you would like to increase the leanness and growth of your steers by breeding the cows to a different breed. What breed would you choose and why?



6. You had small herd of Angus cattle in middle Tennessee that you recently moved to southern Mississippi. After the first summer, you notice that the hot weather is causing a reduction in growth rate of calves and overall productivity of your herd. Explain how you could use cross-breeding to slowly acclimate your herd to the hot weather.
  
7. You have a small dairy operation in East Tennessee. Unfortunately, milk prices plummet so you need some additional income to keep your operation alive. You decide you want to breed some of your lower producing milking cows to a beef breed in order to produce calves that reach market weight quickly. You plan to sell these calves locally as a way to generate extra money for your operation. What beef breed would you choose and why?

## Activity 1: Beef Breed Concentration Game - KEY

### Angus



- From Scotland
- Black and polled
- Maternal breed, also known for excellent growth and carcass traits
- Imported to US in 1873

### Hereford



- From England
- Red with white face
- Horned or Polled
- Maternal breed, known as very hearty breed
- Introduced in US in 1817

### Red Angus



- From Scotland
- Red and polled
- Maternal breed with good terminal performance

### Shorthorn



- From England
- Red, white or roan
- Can be horned or polled
- Maternal breed, very popular in show-ring and club calf industry
- Introduced in US in 1783

### Charolais



- From France
- White and can be horned or polled
- Terminal breed known for muscle and growth
- First brought to US in 1934

### Chianina



- From Italy
- White with black points
- Known for size and growth and being the tallest breed
- Very popular in cross-breeding programs within the club calf industry
- Introduced to US via artificial insemination

### Gelbvieh



- From Germany
- Red or black and can be horned or polled
- Originally selected as a dual-purpose breed, now known for good growth and excellent maternal traits
- Imported to US in 1971 by importation of semen

### **Limousin**



- From France
- Red or black and can be horned or polled
- Terminal breed known for muscle, leanness and high yielding carcass
- Imported to US in 1971

### **Maine-Anjou**



- From France
- Originally red with white markings, now can be red or black
- Known for muscle
- Very popular in cross-breeding programs within the club calf industry
- Introduced to US via artificial insemination

### **Simmental**



- From Switzerland
- Originally red and white color pattern, now can be black or red
- Can be horned or polled
- Originally selected as a dual-purpose breed, now known for excellent growth and one of the heaviest milking of terminal breeds
- Introduced in US in late 1800s but did not last, reintroduced in late 1960s

### **Brahman**



- From India
- Light gray or red to almost black and horned
- Characterized by large hump and abundance of loose skin
- Basis for the American breeds
- Known for heat tolerance and adaptability

### **Brangus**



- Black and polled
- Crossbreed consisting of 3/8 Brahman and 5/8 Angus
- Bred for heat tolerance of Brahman and maternal/carcass traits of Angus
- Development began around 1912 in Louisiana

### **Santa Gertrudis**

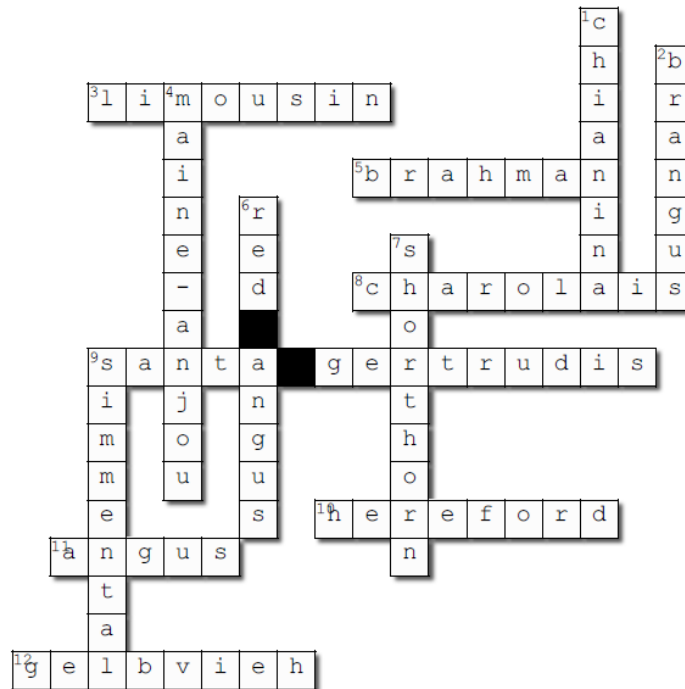


- Red and horned
- Crossbreed consisting of 3/8 Brahman and 5/8 Shorthorn
- Bred for heat tolerance of Brahman and maternal traits of Shorthorn
- Developed at King Ranch in Texas
- First official breed developed in US

## Activity 2: Beef Breed Crossword Puzzle - KEY

### Beef Breeds

Use the descriptions as clues to fill in the crossword puzzle with the correct beef breed names.



Created using the Crossword Maker on TheTeachersCorner.net

#### Across

3. From France, red or black, horned or polled, known for muscle leanness and high yielding carcass, came to U.S. in 1971 (**limousin**)
5. From India, light gray or red to almost black, horned, large hump, loose skin, known for heat tolerance and adaptability (**brahman**)
8. From France, white, can be horned or polled, terminal breed known for muscle and growth, brought to U.S. in 1934 (**charolais**)
9. Red and horned, 3/8 Brahman 5/8 Shorthorn, developed at King Ranch TX, first official breed developed in U.S. (**santa gertrudis**)
10. From England, red with white face, horned and polled varieties, known as a very hearty breed, introduced to U.S. in 1817 (**hereford**)
11. From Scotland, black and polled, maternal breed also known for excellent growth and carcass traits, imported to U.S. in 1873 (**angus**)
12. From Germany, red or black, horned or polled, dual purpose breed, introduced to U.S. in 1971 by importation of semen (**gelbvieh**)

#### Down

1. From Italy, white with black points, tallest breed, popular in cross-breeding programs within club calf industry (**chianina**)
2. Black and polled, 3/8 Brahman 5/8 Angus, bred for heat tolerance of Brahman and maternal/carcass traits of Angus (**brangus**)
4. From France, originally red with white markings but can now be red or black, known for muscle, popular in cross breeding (**maine-anjou**)
6. From Scotland, red and polled, maternal breed with good terminal performance (**red angus**)
7. From England, red white or roan, horned or polled, popular in show ring and club calf industry, introduced to U.S. in 1783 (**shorthorn**)
9. From Switzerland, originally red and white but can now be red or black, horned or polled, heavy milking terminal breed (**simmental**)

### Activity 3: Beef Breed Selection Scenarios - KEY

NOTE: with few exceptions, there are multiple answers that could be correct for each of the below scenarios or even other breeding scenarios. Many times the answer ends up being based on personal preference and experience, location and available resources. The breeds given as answers below are the most common breeds from the breed video. There are certainly more breeds than those listed below that would fit each scenario. Check out more beef breeds at <http://afs.okstate.edu/breeds/cattle/>.

1. You have a small herd of Angus and Hereford commercial cows and you would like to increase the growth and muscle of your steers by breeding the cows to a different breed. What breed would you choose and why?
  - *Charolais – terminal breed known for muscle and growth*
2. You have a small herd of Hereford cows and have recently started selling market ready steers direct to friends and family for meat. Most have reported back to you that they would prefer higher quality beef with more marbling. Which breed would you choose to breed to your Hereford cows and why?
  - *Angus – known for excellent carcass traits, with good marbling*
3. What two terminal breeds would you choose if you wanted to develop commercial heifers to sell to others beef producers in your area that were known for good mothering and milking ability, fast growth and muscle? Explain your answer.
  - *Simmental – originally a dual purpose breed, known excellent growth and heaviest milkers of terminal breeds*
  - *Gelbvieh – originally a dual purpose breed, known good growth*
4. What two breeds (maternal or terminal) would you choose if you wanted to develop commercial heifers known for good maternal traits and growth as well as steer calves that were known for high performance and producing high quality beef? Explain your answer.
  - *Angus – maternal breed also known for excellent growth and carcass*
  - *Red Angus – maternal breed also known for terminal performance*
  - *Simmental – originally a dual purpose breed, known excellent growth and heaviest milkers of terminal breeds*
  - *Gelbvieh – originally a dual purpose breed, known good growth*
5. You have a small herd of Red Angus cows and you would like to increase the leanness and growth of your steers by breeding the cows to a different breed. What breed would you choose and why?
  - *Limousin – known for muscle, leanness and high-yielding carcass*

6. You had small herd of Angus cattle in middle Tennessee that you recently moved to southern Mississippi. After the first summer, you notice that the hot weather is causing a reduction in growth rate of calves and overall productivity of your herd. Explain how you could use cross-breeding to slowly acclimate your herd to the hot weather.
- *Brahman – known for heat tolerance and adaptability*
  - *Brangus – Brahman influenced breed known for heat tolerance*
  - *Santa Gertrudis – Brahman influenced breed known for heat tolerance.*
7. You have a small dairy operation in East Tennessee. Unfortunately, milk prices plummet so you need some additional income to keep your operation alive. You decide you want to breed some of your lower producing milking cows to a beef breed in order to produce calves that reach market weight quickly. You plan to sell these calves locally as a way to generate extra money for your operation. What beef breed would you choose and why?
- *Pretty much any of the breeds would work for this scenario. In East Tennessee, you probably would not choose the Brahman-influenced breeds.*