

Beef Tag

Background Knowledge:

All living things have basic needs of food, water, air and shelter. Beef farmers work to provide these basic needs to their cattle in all stages of beef production. As ruminants, beef cattle are able to digest grasses, so much of their food is from grazing in pastures or hay. Some farmers also provide grain to their cattle. Beef farmers will work with livestock nutritionists to ensure their animals are receiving well-balanced diets built around the crops available to that specific producer. Cattle need a lot of water, so beef farmers will make sure they have constant access to a clean water supply. Many cattle will live most of their lives outside, however farmers will provide the appropriate shelter to protect them from extreme weather conditions. They will closely monitor their cattle and check their fences to make sure their cattle are kept safely in the pasture and watch to make sure there are no predators trying to harm their cattle. Feedlots are designed to provide cattle with enough space to move around without spending extra energy finding a food source.

Procedure:

1. Ask the students, "What do you need to survive?" (food, water, air, and shelter)
2. Ask students if they think beef cattle have the same or different needs. Discuss their responses and guide them to the fact that beef cattle have the same basic needs as humans.
3. Take the class to gym or open outdoor area and set boundary to represent the pasture. Tell students they are going to play "Beef Tag". Assign 2-3 students to act as predators (animals or diseases that could be dangerous to beef cattle). Identify predators with headbands or name tags. The rest of the class will be grazing beef cattle.
4. Spread all the poker chips representing animal needs (green for food, blue for water, white for air) and the hula hoops (representing shelter) throughout the pasture space.
5. Explain to the class that the cattle will have two minutes to graze around the pasture collecting animal needs chips while trying to avoid being caught by the predators. If a predator tags a beef animal, they are out of the game and should move to the edge of the pasture until the game is over. Each animal is trying to collect one food chip, one water chip and one air chip before time is up. The hula hoops represent shelter. When an animal is standing inside a hula hoop, they are safe from the predators and cannot be caught. Only two cattle can stand in a hula hoop at a time, and they may only stay there for ten seconds.
6. After one round is complete, choose new predators and play again. You may want to play the game varying the amount of resources, size of the pasture, number of predators, and/or number of shelters and discuss how these changes affect the survival of the cattle.
7. Review with the students the importance of food, water, air and shelter to cattle and the ways in which beef farmers provide their animals with these basic needs.

Extension:

Have the students write a journal entry as either a farmer, describing how he or she met the needs of their beef cattle that day, or as a beef animal, telling how they got their food, water, air and shelter needs for the day.

Objectives: Students will

- Identify the basic needs of animals, specifically beef cattle.

Materials:

- 12 green poker chips (represent food)
- 12 blue poker chips (represent water)
- 12 white poker chips (represent air)
- 3 large hula hoops (represent shelter)

Standards: This lesson assists in meeting the following PA standards:

3.1.A1; 3.1.A2; 3.1.A3; 3.1.B1; 4.1.A; 4.1.C; 4.1.C; 4.3.A; 4.3.B; 4.4.A; 4.4.B; 4.4.C; 4.4.D; 4.5.A