**Lesson Title: Selection and Evaluation of Swine**

**Unit: 8**

TEKS: 130.7(C) 5 (a)(b)(c)

OBJECTIVES

The student shall be able to:

1. List selection priorities of market and breeding swine in order of importance
2. Evaluate selection priorities of market and breeding swine
3. Understand the purpose of market and breeding swine selection

TEACHING MATERIALS, TOOLS, AND EQUIPMENT

 PPT: Selection of livestock (start on slide #25)

TEACHING PROCEDURE

|  |  |
| --- | --- |
| Interest Approach/Anticipatory Set | Teacher Notes |
| Review- open discussion of cattle evaluation priorities | Teacher initiated- student led |

|  |  |
| --- | --- |
| Teaching Plan and Strategy / Presentation of New Material | Teacher Notes |
| **Market Hogs**The same general principles are applied when evaluating hogs, however there are some differences. First, a hog looks different from a steer. We sell hogs once they have reached their marketable weight which is 250 lbs. They are also raised in confinement, although this is usually done indoors on a concrete slab.Muscle ContentMuscle shape is found through the shoulders, the back (also called the loin) and the ham. The tenderness of the cuts of meat is the same in steers. The loin is the most tender, the ham the second and the shoulder the third.Lean GrowthLean growth and muscle shape is very important in hogs. Because we don’t have true standards to measure quality with in the pork industry and consumers don’t desire fatty pork. (remember the old commercials “Pork, the other white meat”). Hogs need to finish out at 250 lbs. in a lean muscles state, if they finish out at 250 lbs. and a fat, that meat is not desirable by consumers. You should be able to see muscle definition (definition is grooves a lines within the muscle, showing a lean shape) should occur through the shoulder. It should also appear over the back, it shows up as a groove straight down the middle of the back, and also within the ham. Skeletal Width and DimensionWidth within a skeleton should show how much muscle growth will occur. A wide hog has more room to lay on muscle than compared to a narrow hog.Structural CorrectnessStructural correctness probably has the largest impact within the market hog community. Generally, hogs that are raised for meat and raised in a confinement setting, most often on a concrete slab. Concrete does not have any give, like the ground outside would, so the angles of a hogs joints must be soft and flexible. Much like in cattle, the angle of the shoulder and the pasterns must be 45 degrees. The back must be straight, and the knee and hick must be flexible. If the hock or knee is straight, the stride will be shorter and thereby uncomfortable during motion.Balance and Eye AppealIs the last on this list of priorities, because if the hog does not have the above qualities they will not be balanced. Balance includes a levelness of topline and hip. An extended neck that goes straight ahead of the shoulder blades and strength directly behind the blades.**Breeding Hogs**The importance of the way a breeding hog looks is because their phenotype or appearance is directly related to their genotype, or genetics. Breeding animals pass their genetic traits to the offspring. If a sow or boar is unattractive, or does not have that much muscle.FunctionalityFunctionality is based upon two things, structural soundness and internal dimension and body condition.Growth PerformanceGrowth performance has a large impact on the meat industry, like we stated during the breeding heifer lecture a larger calf produces more meat, thereby a larger sow produces a larger piglet. This result in more dollars for the farmers. Growth performance is genetic, so it is important that the sow has the genetics to produce a piglet with a good growth performance. MuscleMuscle is not as big of a deal within a sow as it is for the boar. The sow will pass on maternal characteristics, while the boar is responsible for passing on the terminal characteristics, which is primarily muscle and leanness.Maternal CharacteristicsThe vulva should be correct in shape, not too small and turned upward, which would be difficult for the boar to insert his penis in order to inseminate, and also not too large which may cause bacterial infections.The underline is generally 7 on 7. This means that there should be 7 teats on both sides. The teats should be equally spaced and free of pin nipples (these are nipples that do not produce milk) or blunt nipples (which are difficult for the piglet to drink from). | Lecture |

ENGAGEMENT

Write at least one paragraph each on the ideal market hog and the ideal breeding hog. This should be descriptive and use terminology used in class.

EVALUATION

Students will be evaluated on their summaries of the idea market and breeding hog. Students should include muscle growth, skeletal width, structural correctness, and balance.

ADDITIONAL MATERIALS

College & Career Readiness Standards: II.C.1; II.E.7

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