Swine Management Practices

**Media Type:** DVD  
**Duration:** 40 minutes  
**ISBN:** 9781603331548

**Description:**  
Students and future swine producers will be provided beneficial information on the swine industry. Different swine operations, breeds, selection, nutrition, reproduction and swine management is discussed in the program. Facilities, vaccinations, ear notching and castration are also covered.

**Horizontal Alignment**

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Swine Management Practices (CEV80137)
Swine Management Practices

Goal: To learn basic information about the swine industry

objectives

1. The student will identify the many breeds of swine.
2. The student will learn the types of swine operations.
3. The student will gain a general knowledge of swine nutrition and health.
4. The student will gain an understanding of swine selection, breeding and reproduction.
5. The student will learn the many tasks involved in swine management.
6. The student will become familiar with pork consumption and by-products.

lesson links

1. Swine Management Practices Worksheet and Answer Key
2. Swine Management Practices Quizzes and Answer Keys
4. Ear Notching Worksheet and Answer Key
5. Swine Management Practices Crossword and Answer Key
6. Ear Notch Speed Game Teacher Instruction Sheet
Class 1: Show the Swine Management Practices presentation. Students will complete the Swine Management Practices Worksheet which coincides with the presentation. Grade using the Answer Key. Pause between each section and allow students to complete the appropriate Swine Management Practices Quizzes—the presentation prompts you when to complete each quiz. Grade using the Answer Keys. However, do not give students the Final Quiz, this will be completed in a later class period. If time does not permit you to view the entire presentation, you may continue viewing it during Class two.

Class 2: If needed, view the remaining portion of the presentation. Review the material discussed in the presentation. Distribute the Swine Management Practices Vocabulary Handout. Explain ear notching to the students and distribute the Ear Notching Worksheet and grade using the Answer Key.

Class 3: Have students complete the Swine Management Practices Crossword. Grade using the Answer Key. Using the Ear Notch Speed Game Teacher Instruction Sheet, complete Part one of the game.

Class 4: Have students complete the Final Quiz of the Swine Management Practices Quizzes, then discuss the correct answers as a class using the Answer Keys. Using the Ear Notch Speed Game Teacher Instruction Sheet, complete Part two of the game.

internet sources:
- http://www.swinefile.com/
- http://www.thepigsite.com/

project:
Ear Notch Speed Game
Directions:
Students will be divided into two teams. They will race to see who can correctly read the ear notch diagrams the fastest.
Swine Management Practices

Vertical Integration
a form of ownership or strategic management where more than one section of an industry is combined under the same ownership

Berkshire
the breed is black in color with six white points, those being the legs, snout and the switch of the tail

Chester White
the modern Chester White is solid white in color and has drooped ears

Duroc
the breed is solid red in color, has drooped ears and a dish to the face

Hampshire
the breed has erect ears and is black with at white belt behind the shoulder

Hereford
the animals of this breed are red with white faces, feet and underline

Landrace
the breed is large framed with solid white large drooping ears carried close to the face

Poland China
the breed is black with the six white points and drooped ears

Spot
the breed is black with white spots and drooped ears

Tamworth
the breed is red in color with erect ears

Yorkshire
the breed is solid white in color with erect ears

Farrow-to-Finish
vertically integrated production scheme where the offspring from bred sows are cared for and fed by the owner until slaughter weight is reached
Swine Management Practices

Farrow-to-Nursery
sows are farrowed out and the piglets are sold at weaning to a finishing operation

Finishing Operation
purchases weanling pigs and feeds them to slaughter weight, at which time they will be sold for slaughter

Estrus
the period of time in a sow’s cycle when she is receptive to a boar for breeding purposes

Castration
the removal of the testicles from a male animal
Swine Management Practices

Directions:
Fill in the blanks.

1. _________________ _____________ is a form of ownership or strategic management where all or more than one section of an industry is combined under the same ownership.

2. _______________ are known for producing high quality meats and they are black in color with six white points.

3. _______________ ______________ have good maternal characteristics, are solid white in color and have drooped ears.

4. ____________ is a breed which is solid red in color and is an excellent meat type hog.

5. ________________ is a breed that is black and has a white belt behind the shoulder.

6. ______________ is a breed that is red with white faces, feet and underline.

7. ________________ is a breed which is extremely long bodied and is solid white in color.

8. _______________ ____________ is a breed that is black with six white points and drooped ears, and is known for their ability to easily and efficiently gain weight.

9. ____________ is a breed known for their rapid weight gain and have black and white spots with drooped ears.

10. ______________________ known for their bacon production, are red in color and have erect ears.

11. __________________________ known as the mother breed, is solid white in color and have erect ears.

12. A _________________ - _____ - ________________ operation is a vertically integrated production scheme where the offspring from bred sows are cared for and fed by the owner until they reach slaughter weight.

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13. A __________________-____-_____________ operation is a system where sows are farrowed out and the piglets are sold at weaning.

14. A ______________________________ operation is a system where weanling pigs are purchased and are fed to slaughter weight, then sold for slaughter.

15. An operation which produces purebred breeding stock for purebred and commercial operations is known as a ____________________ operation.

16. The ___________________________ ________________ is designed for pregnant females, which are penned alone.

17. Swine are ________________________________, meaning they have a digestive system containing one true stomach.

18. ______________ is the first limiting nutrient, and animal will not thrive or survive long without it.

19. ___________________________ ________________ and growth rate, or ____________________________ are the two main factors in selecting breeding hogs.

20. All selection and breeding programs should be _______________-________________ depending upon market demand.

21. Sows can only be bred during ________________, the period of time in a sow’s cycle when she is receptive to a boar for breeding purposes and the vulva is swollen and red.

22. The gestation length of swine is ___ months, ___ weeks and ____ days or _____ days.

23. ____________________________ is the mother’s first milk and contains the antibodies necessary for the piglet’s health.

24. _______ ____________ is the universal swine identification system.

25. ______________________________ is the removal of the testicles from a male animal.
Swine Management Practices

26. The primary market of the swine industry is ______________________
_______________________.

27. The possible US Grades for pork are _________________________ and
_____________________.

28. Two by-products of pork are: pork ___________ and pork ___________.

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Across
1. The animals of this breed are red with white faces, feet and underl
5. The breed is black with the six white points and drooped ears
7. The breed is solid white in color with erect ears
8. The modern Chester White is solid white in color and has drooped ears
9. The breed is red in color with erect ears
10. The breed is solid red in color, has drooped ears and a dish to the face
11. The breed is black in color with six white points, those being the legs, snout and the switch of the tail
12. The period of time in a sow’s cycle when she is receptive to a boar for breeding purposes
14. Is a form of ownership or strategic management where more than one section of an industry is combined under the same ownership
15. The breed is large framed with solid white large drooping ears carried close to the face

Down
2. Purchases weanling pigs and feeds them to slaughter weight, at which time they will be sold for slaughter
3. The breed has erect ears and is black with at white belt behind the shoulder
4. The removal of the testicles from a male animal
6. Sows are farrowed out and the piglets are sold at weaning to a finishing operation
13. The breed is black with white spots and drooped ears

Accompanies: Swine Management Practices (CEV80137)
Ear Notching

Directions:
Using the information below, determine the correct litter and pig number.

A. When referring to right and left on a pig, we do so from the pig's perspective.
   1. Therefore the pig's right and left are the same as yours if you are standing in back of the pig.

B. The pig's right ear is called the litter ear. It is similar to a last name.
   1. When a sow has a litter, all pigs in the litter receive identical notches on the right ear. (Just like children in the same family have a common last name.)

C. The left ear in pigs is like the first name for humans, every pig in the litter gets his own unique notch in the left ear.
   1. Instead of names though, pigs are identified by numbers. (The number scheme is illustrated below.)

D. The relative quadrants of the ear: the one, three, nine, 27 quadrants, and an 81 may be notched at the very tip of the ear.

E. Two notches are allowed in each quadrant.
   1. All numbers in the right ear are added to make the litter number.
   2. All the numbers in the left ear are added to identify the individual pig within that litter.
   3. With this system every number from one through 161 can be created on each ear.

F. A pig can have a minimum of one notch on each ear, and a maximum of nine notches on an ear.

G. If the right ear is 1+1+3+3+9+9+27+27+8, that equals 161.
   1. Therefore this pig came from litter number 161 on your farm.
   2. If the left ear adds up to one, this was the first pig notched in that litter.

H. The pig's name would be 161-1. When saying a pig's notch we state the litter number followed by the individual number. Also, always pronounce "dash" between the two numbers.
Ear Notching

RIGHT

LEFT

Liter # ______
Pig # ______

RIGHT

LEFT

Liter # ______
Pig # ______

Accompanies: Swine Management Practices (CEV80137)
Ear Notching

Liter # ______
Pig # ______

Liter # ______
Pig # ______

Accompanies: Swine Management Practices (CEV80137)
Swine Management Practices - Quiz I

Directions:
Answer the following questions.

___ 1. The majority of swine breeds are believed to be descendants of the
   a. Berkshire
   b. Yorkshire
   c. Eurasian wild boar
   d. All of the above

___ 2. Which breed is solid white in color and has drooped ears?
   a. Berkshire
   b. Chester White
   c. Duroc
   d. Hampshire

___ 3. Which breed is extremely long bodied and known for their maternal
   instincts?
   a. Landrace
   b. Chester White
   c. Yorkshire
   d. Berkshire

___ 4. Which breed has is black with a black belt behind its shoulders?
   a. Duroc
   b. Spot
   c. Hampshire
   d. Hereford

___ 5. Which breed is red in color and known for their bacon production?
   a. Duroc
   b. Poland China
   c. Spot
   d. Tamworth
Swine Management Practices - Quiz II

Directions:
Answer the following questions.

___ 1. Which type of operation farrows out and then sells the piglets at weaning?
   a. farrow-to-finish
   b. farrow-to-nursery
   c. seedstock
   d. show pigs

___ 2. Which type of operation produces purebed breeding stock for purebred and commercial operations?
   a. farrow-to-finish
   b. farrow-to-nursery
   c. seedstock
   d. show pigs

___ 3. Which type of barn is used for just weaned pigs?
   a. gestation house
   b. farrowing house
   c. finishing barn
   d. nursery

___ 4. Pigs are ____________________, meaning they have one true stomach.
   a. nonruminants
   b. ruminants
   c. bigastric
   d. trigastric

___ 5. Typically a young animal requires a higher level of protein in the diet than does an adult.
   a. true
   b. false
Swine Management Practices - Quiz III

Directions:
Answer the following questions.

___ 1. The underline is important only in females as they should have a minimum of six evenly spaced nipples.
   a. true
   b. false

___ 2. What is the period of time in a sow’s cycle when she is receptive to a boar for breeding purposes and the vulva is swollen and red?
   a. gestation
   b. farrowing
   c. colostrum
   d. estrus

___ 3. What is the gestation length of swine?
   a. 114 days
   b. 214 days
   c. 104 days
   d. 204 days

___ 4. What is known as the mother’s first milk and contains antibodies necessary for the piglets’ health?
   a. gestation
   b. farrowing
   c. colostrum
   d. estrus

___ 5. What management practices should be performed on the liter within the first two weeks of age?
   A. clipping needle teeth
   B. tails trimmed
   C. ears notched
   D. all of the above
Swine Management Practices - Quiz IV

Directions:
Answer the following questions.

___ 1. Worldwide, more pork is eaten than any other meat.
   a. true
   b. false

___ 2. What are the USDA grades for pork?
   a. one, two, three, four
   b. A, B, C, D
   c. prime, choice, grade, standard
   d. acceptable, utility

___ 3. What is a by-product of pork?
   a. pork fat
   b. pork skins
   c. insulin
   d. all of the above

___ 4. What is NOT wholesale cut of a pork carcass?
   a. brisket
   b. ham
   c. loin
   d. shoulder

___ 5. USDA quality grades are voluntary.
   a. true
   b. false
Directions:
Answer the following questions.

___ 1. _____________ is a form of ownership or strategic management where all or more than one section of an industry is combined under the same ownership.
   a. Seedstock operation
   b. Vertical integration
   c. Farrow-to-finish
   d. Farrow-to-nursery

___ 2. Which breed is red with white faces, feet and underline?
   a. Hampshire
   b. Duroc
   c. Hereford
   d. Tamworth

___ 3. What is the first limiting nutrient of all animals?
   a. water
   b. protein
   c. minerals
   d. vitamins

___ 4. What is a main factor in selecting breeding hogs?
   a. muscling
   b. frame size
   c. structural Correctness
   d. maternal traits

___ 5. _________________ is the period of time in a sow’s cycle when she is receptive to a boar for breeding purposes and the vulva is swollen and red.
   a. Gestation
   b. Farrowing
   c. Castration
   d. Estrus

___ 6. The gestation length of swine is three weeks and three days.
   a. true
   b. false
__ 7. _____________ is the mother’s first milk and contains the antibodies necessary for the piglets’ health.
   a. Gestation  
   b. Castration  
   c. Farrowing  
   d. Colostrum

__ 8. _____________ is the universal swine identification system.
   a. Ear notching  
   b. Ear tagging  
   c. Tail trimming  
   d. Castration

__ 9. _____________ is the removal of the testicles from a male animal.
   a. Ear notching  
   b. Ear tagging  
   c. Tail trimming  
   d. Castration

__ 10. The USDA pork grades are one, two, three, four and utility.
   a. true  
   b. false
Ear Notch Speed Game

Directions:
Part one: Have students divide into two groups. Attach two sets of the included pig diagrams to the board.

Have one student from each group come to the board and race to see who can read the ear notch the fastest with a time limit of three minutes.

Give the fastest student one point for their team. Then, have the next two students come to the board and so forth. Using the stop watch, time the entire process for each team and announce the winning team.

Part two: Repeat the entire process with students remaining in the same teams.

Compare the time difference between parts one and two.

Materials:
1. Copies of handout
2. Two sets of the pig diagrams
3. Tape
4. Chalk or markers
5. Stop watch

Preparation:
1. Tape the two sets of the pig diagrams to the board
2. Ensure you have enough chalk or markers
3. Ensure the stop watch works

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Swine Management Practices

Directions:
Fill in the blanks.

1. **Vertical integration** is a form of ownership or strategic management where all or more than one section of an industry is combined under the same ownership.

2. **Berkshires** are known for producing high quality meats and they are black in color with six white points.

3. **Chester whites** have good maternal characteristics, are solid white in color and have drooped ears.

4. **Duroc** is a breed which is solid red in color and is an excellent meat type hog.

5. **Hampshire** is a breed that is black and has a white belt behind the shoulder.

6. **Hereford** is a breed that is red with white faces, feet and underline.

7. **Landrace** is a breed which is extremely long bodied and is solid white in color.

8. **Poland China** is a breed that is black with six white points and drooped ears, and is known for their ability to easily and efficiently gain weight.

9. **Spot** is a breed known for their rapid weight gain and have black and white spots with drooped ears.

10. **Tamworth**, known for their bacon production, are red in color and have erect ears.

11. **Yorkshire**, known as the mother breed, is solid white in color and have erect ears.

12. A **farrow-to-finish** operation is a vertically integrated production scheme where the offspring from bred sows are cared for and fed by the owner until they reach slaughter weight.
Swine Management Practices

13. A **farrow-to-nursery** operation is a system where sows are farrowed out and the piglets are sold at weaning.

14. A **finishing** operation is a system where weanling pigs are purchased and are fed to slaughter weight, then sold for slaughter.

15. An operation which produces purebred breeding stock for purebred and commercial operations is known as a **seedstock** operation.

16. The **gestation house** is designed for pregnant females, which are penned alone.

17. Swine are **nonruminants**, meaning they have a digestive system containing one true stomach.

18. **Water** is the first limiting nutrient, and animal will not thrive or survive long without it.

19. **Structural correctness** and growth rate, or **performance** are the two main factors in selecting breeding hogs.

20. All selection and breeding programs should be **goal-based** depending upon market demand.

21. Sows can only be bred during **estrus**, the period of time in a sow’s cycle when she is receptive to a boar for breeding purposes and the vulva is swollen and red.

22. The gestation length of swine is **three** months, **three** weeks and **three** days or **114** days.

23. **Colostrum** is the mother’s first milk and contains the antibodies necessary for the piglet’s health.

24. **Ear notching** is the universal swine identification system.

25. **Castration** is the removal of the testicles from a male animal.

26. The primary market of the swine industry is **human consumption**.

Accompanies: Swine Management Practice (CEV80137)
Swine Management Practices

27. The possible US Grades for pork are acceptable and utility.

28. Two by-products of pork are: pork fats and pork skins.
Swine Management Practices

Accompanies: Swine Management Practices (CEV80137)
Ear Notching

Directions:
Using the information below, determine the correct litter and pig number.

A. When referring to right and left on a pig, we do so from the pig's perspective.
   1. Therefore the pig's right and left are the same as yours if you are standing in back of the pig.

B. The pig's right ear is called the litter ear. It is similar to a last name.
   1. When a sow has a litter, all pigs in the litter receive identical notches on the right ear. (Just like children in the same family have a common last name.)

C. The left ear in pigs is like the first name for humans, every pig in the litter gets his own unique notch in the left ear.
   1. Instead of names though, pigs are identified by numbers. (The number scheme is illustrated below.)

D. The relative quadrants of the ear: the one, three, nine, 27 quadrants, and an 81 may be notched at the very tip of the ear.

E. Two notches are allowed in each quadrant.
   1. All numbers in the right ear are added to make the litter number.  
   2. All the numbers in the left ear are added to identify the individual pig within that litter.
   3. With this system every number from one through 161 can be created on each ear.

F. A pig can have a minimum of one notch on each ear, and a maximum of nine notches on an ear.

G. If the right ear is 1+1+3+3+9+9+27+27+8, that equals 161.
   1. Therefore this pig came from litter number 161 on your farm.
   2. If the left ear adds up to one, this was the first pig notched in that litter.

H. The pig's name would be 161-1. When saying a pig's notch we state the litter number followed by the individual number. Also, always pronounce "dash" between the two numbers.
Ear Notching

RIGHT

LEFT

RIGHT

LEFT

Liter # 41
Pig # 3

Liter # 41
Pig # 10

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Ear Notching

Liter # 54
Pig # 12

Liter # 33
Pig # 11

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Swine Management Practices - Quiz I

Directions:
Answer the following questions.

1. The majority of swine breeds are believed to be descendants of the
   a. Berkshire
   b. Yorkshire
   c. Eurasian wild boar
   c. All of the above

2. Which breed is solid white in color and has drooped ears?
   a. Berkshire
   b. Chester White
   c. Duroc
   d. Hampshire

3. Which breed is extremely long bodied and known for their maternal
   instincts?
   a. Landrace
   b. Chester White
   c. Yorkshire
   d. Berkshire

4. Which breed has is black with a black belt behind its shoulders?
   a. Duroc
   b. Spot
   c. Hampshire
   d. Hereford

5. Which breed is red in color and known for their bacon production?
   a. Duroc
   b. Poland China
   c. Spot
   d. Tamworth

Accompanies: Swine Management Practices (CEV80137)
Swine Management Practices - Quiz II

Directions:
Answer the following questions.

b 1. Which type of operation farrows out and then sells the piglets at weaning?
   a. farrow-to-finish
   b. farrow-to-nursery
   c. seedstock
   d. show pigs

c 2. Which type of operation produces purebed breeding stock for purebred and commercial operations?
   a. farrow-to-finish
   b. farrow-to-nursery
   c. seedstock
   d. show pigs

d 3. Which type of barn is used for just weaned pigs?
   a. gestation house
   b. farrowing house
   c. finishing barn
   d. nursery

a 4. Pigs are ________________, meaning they have one true stomach.
   a. nonruminants
   b. ruminants
   c. bigastric
   d. trigastric

a 5. Typically a young animal requires a higher level of protein in the diet than does an adult.
   a. true
   b. false
Swine Management Practices - Quiz III

Directions:
Answer the following questions.

b 1. The underline is important only in females as they should have a minimum of six evenly spaced nipples.
   a. true
   b. false

d 2. What is the period of time in a sow’s cycle when she is receptive to a boar for breeding purposes and the vulva is swollen and red?
   a. gestation
   b. farrowing
   c. colostrum
   d. estrus

a 3. What is the gestation length of swine?
   a. 114 days
   b. 214 days
   c. 104 days
   d. 204 days

c 4. What is known as the mother’s first milk and contains antibodies necessary for the piglets’ health?
   a. gestation
   b. farrowing
   c. colostrum
   d. estrus

d 5. What management practices should be performed on the liter within the first two weeks of age?
   a. clipping needle teeth
   b. tails trimmed
   c. ears notched
   d. all of the above
Swine Management Practices - Quiz IV

Directions:
Answer the following questions.

b 1. Worldwide, more pork is eaten than any other meat.
   a. true
   b. false

d 2. What are the USDA grades for pork?
   a. One, two, three, four
   b. A, B, C, D
   c. prime, choice, grade, standard
   d. acceptable, utility

d 3. What is a by-product of pork?
   a. pork fat
   b. pork skins
   c. insulin
   d. all of the above

a 4. What is NOT wholesale cut of a pork carcass?
   a. brisket
   b. ham
   c. loin
   d. shoulder

a 5. USDA quality grades are voluntary.
   a. true
   b. false
Swine Management Practices - Final

Directions:
Answer the following questions.

1. _____________ is a form of ownership or strategic management where all or more than one section of an industry is combined under the same ownership.
   a. Seedstock operation
   b. Vertical integration
   c. Farrow-to-finish
   d. Farrow-to-nursery

2. Which breed is red with white faces, feet and underline?
   a. Hampshire
   b. Duroc
   c. Hereford
   d. Tamworth

3. What is the first limiting nutrient of all animals?
   a. water
   b. protein
   c. minerals
   d. vitamins

4. What is a main factor in selecting breeding hogs?
   a. muscling
   b. frame size
   c. structural Correctness
   d. maternal traits

5. _________________ is the period of time in a sow’s cycle when she is receptive to a boar for breeding purposes and the vulva is swollen and red.
   a. Gestation
   b. Farrowing
   c. Castration
   d. Estrus

6. The gestation length of swine is three weeks and three days.
   a. true
   b. false
Swine Management Practices - Quiz I

7. ___________ is the mother’s first milk and contains the antibodies necessary for the piglets’ health.
   a. Gestation
   b. Castration
   c. Farrowing
   d. Colostrum

8. ___________ is the universal swine identification system.
   a. Ear notching
   b. Ear tagging
   c. Tail trimming
   d. Castration

9. ___________ is the removal of the testicles from a male animal.
   a. Ear notching
   b. Ear tagging
   c. Tail trimming
   d. Castration

10. The USDA pork grades are one, two, three, four and utility.
    a. true
    b. false