



Livestock Management Practices

Middle School Food and Agricultural Literacy Curriculum

Precepts

- G. Physical Growth
- G2. Respect one's body.

National Standards

- AS.06.01.02.a. Explain the implications of animal welfare and animal rights for animal agriculture.
- CS.02.01.01.a. Identify how healthy and unhealthy food affects one's body.
- NL-ENG.K-12.3 – Evaluation Strategies
- NL-ENG.K-12.12 – Applying Language Skills
- NS.5-8.6 – Science in Personal and Social Perspectives

Student Learning Objectives

- As a result of this **unit** the students will...
- Recognize common production systems in the United States.
- As a result of this **lesson** the students will...
- Explain the uses of common management practices for livestock.

Content Outline

I. Common Management Practices in Livestock Production

- A. **Castration** – removing the testes to prevent unwanted breeding, leads to better meat, and results in less fighting and aggressive behavior among males
- B. **Dehorning** – to remove or prevent the growth of horns to protect humans and other animals from being injured
- C. **Vaccination** – administering microorganisms to increase immunity to a particular disease
- D. **Identification** – method used to label livestock for the purpose of individual recognition
 - Examples: ear tag, tattoo, ear notch, brands, electronic id, neck chains, nose prints

Time

Instruction time for this lesson: 45 minutes.

Resources

Debeaking. (n.d.) Merriam-Webster's online dictionary (11th ed.). Retrieved on July 31, 2009, from <http://www.merriam-webster.com/dictionary/debeaking> — Dehorning. (n.d.) Merriam-Webster's online dictionary (11th ed.). Retrieved on July 31, 2009, from <http://www.merriam-webster.com/dictionary/dehorning> — Docking. (n.d.) Merriam-Webster's online dictionary (11th ed.). Retrieved on July 31, 2009, from <http://www.merriam-webster.com/dictionary/docking> Morgan, Elizabeth M, et al. *AgriScience Explorations*. Illinois: Interstate Publishers, Inc., 1998. — Pork Story. (n.d.) Retrieved July 30, 2009 from Pork Check-off: Official Website: <http://www.pork.org/newsandinformation/quickfacts/porkstory9.aspx> — Shearing. (n.d.) Merriam-Webster's online dictionary (11th ed.). Retrieved on July 31, 2009, from <http://www.merriam-webster.com/dictionary/shearing> — Vaccine. (n.d.) Merriam-Webster's online dictionary (11th ed.). Retrieved on July 31, 2009, from <http://www.merriam-webster.com/dictionary/vaccine>

Tools, Equipment, and Supplies

Overhead projector/transparencies (optional)
Computer with PowerPoint capabilities (optional)
Writing surface
Marker or chalk
Notebook paper
Writing utensils
MS.AS.2.4.AS.A – two per class: one cut up prior to class; one used as a transparency master or PowerPoint slide
MS.AS.2.4.AS.B – one per student and one as a transparency master or PowerPoint slide
MS.AS.2.4.AS.ESS.A – one per student

Key Terms

The following terms are presented in this lesson and appear in **bold italics**:

<i>Castration</i>	<i>Dehorning</i>
<i>Vaccination</i>	<i>Identification</i>
<i>Docking</i>	<i>Teeth Clipping</i>
<i>Debeaking</i>	<i>Shearing</i>

- E. ***Docking*** – removal of a portion of the tail to prevent the anus from becoming dirty possibly resulting in disease
- F. ***Teeth Clipping*** – clipping the needle teeth of piglets to prevent injuries to other pigs
- G. ***Debeaking*** – to remove the tip of the upper mandible to prevent cannibalism and fighting



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H. **Shearing** – to cut or clip the hair or wool (the reason for **shearing** varies by species and breed)

Interest Approach

In preparation for today's lesson, write the following events on a writing surface at the front of the room in no particular order: dentist, birth certificate, Social Security card, haircut, shots, braces, lose your teeth, and obtain your driver's license. As a class, you will put them in order in which commonly happens first to last and talk about why we do these things. This list will then be compared to similar activities used in livestock production.

Get ready for a lesson in which you will learn lots of new information. But first, let's take out some paper and a writing utensil. Take no more than 10 seconds to do this...now!

Pause for 10 seconds.

Great work, everyone. Let's talk about ourselves! That's always a good topic, right?

On the board is a list of things most people will need or experience in their life. Your challenge is to write these events in the order that commonly happens first to last on your paper in one minute. What questions do you have? GO!

Supervise students working. There may be some variations in the order they choose and that is fine.

Wrap up your thoughts in 3...2...1. Great! Now compare your list with the person sitting next to you.

Allow students one minute to compare lists then move on.

Two questions: What differences did you find when comparing your list to your partner's? Were a majority of your events in the same order as your partner? Who will share their thoughts with the class?

Discuss. Anticipated responses: most were in a similar order with slight variations.

What purpose do these events hold?

Discuss. Anticipated responses: to stay healthy, to be identified by our government, personal hygiene etc.

What are specific ways we strive to keep a healthy body?

Anticipated answers: exercise, eat healthy foods, and avoid toxins such as alcohol and cigarettes.

Why is it important that we strive to maintain a healthy body?

Anticipated answers: to live a long life, to avoid dangerous diseases, to be happy.

Each of us has experienced events similar to these in our own lives. We manage our health by doing some of these things or maintain our personal identity by having those documents to prove we are who we say we are. The same is true for livestock, but we have to manage those things for them. Let's take a closer look into livestock management practices.

Summary of Content and Teaching Strategies

Objective 1. Explain the uses of common management practices for livestock.

Use the Go-Get-It e-Moment® so students can go and get the information they need. Place the cut up pieces from one copy of **MS.AS.2.4.AS.A** around the room in inconspicuous or obvious places. A second copy of this could be used as a transparency master or PowerPoint slide. Distribute **MS.AS.2.4.AS.B** to students before proceeding.

To begin we need to do some investigating! Around the room are eight pieces of paper that have important clues for today's lesson. When you hear the word GO, search the room high and low to locate the papers. If you find a sheet of paper, report to the front of the room. If you do not have a slip of paper, pick up this activity sheet on the way to your seat. What questions are there? GO!

Monitor student progress and provide clues if needed. Remind students that find a clue to report to the front of the room to share.

Great investigating. Let's see what clues you found. While the students at the front of the room share their information, be sure to record the definitions on your activity sheets.



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Have students share their information while the class records the information on **MS.AS.2.4.AS.B**. If students need to see the information while they write the definitions, make a second copy of **MS.AS.2.4.AS.B** to serve as a transparency master.

Think back to our first activity of the day and then decide how these terms relate to the events that happen to a human.

Anticipated results: **Shearing** = Haircut; **Vaccinations** = **Vaccinations**; **Identification**=Social Security Card, Birth Certificate, and Driver's License.

Not all of these practices are used on all species of livestock. Species is a scientific designation for a group of animals with similar characteristics. The species we will focus on today include: beef and dairy cattle, sheep, goats, swine, and poultry. Predict which species you believe use each management practice. Use a pencil so that you can revise your work. You will have one minute. Begin.

Monitor time and student progress.

Let's compare our answers. When you hear the word GO, discuss with a partner sitting next to you why you selected the species you did. GO.

Monitor time and student progress.

Let's see how you did!

Go over the following answer sheet **MS.AS.2.4.AS.B (Answers)**. Encourage students to change their answers in order to have a complete and accurate sheet.

Livestock producers use these management practices along with veterinary care and carefully designed diets to keep their livestock healthy and productive.

To keep each of us healthy, it is importance to follow practices that have been proven to keep humans healthy. Getting **vaccinations**, check-ups at the doctor and dentist, following a healthy diet and exercise plan are just a few ways you can keep yourself healthy just like producers keep their livestock healthy.

Review/Summary

Use the Newton e-Moment to review the content. Individually students will write at least three "Why" questions related to today's content. Next, the questions will be posed one at a time from the students, and class members try to answer. If no one knows the answer, place the question on the board. Return to the questions on the board and provide clues or answers or incorporate into a homework assignment.

We have climbed to the top of a mountain of information today! However, I am sure there are still questions out there. When you hear the word GO, get a piece of scratch paper and a writing utensil ready. Next, identify three "Why" questions you have from today's lesson and write them on your paper. What questions are there? GO!

Example questions include: Why would they clip the beak of poultry? Why is animal **identification** important? Or why are not all animals shorn?

Supervise student work. Provide a countdown when most students are nearing completion.

Wrap up your thoughts in 3...2...1. We will share our questions in "rapid fire," meaning anyone can ask one of their questions and then anyone can answer. If we do not have an answer, I will write it on the board. Who will start?

Continue the question/response until all students have participated or as long as time allows.

Let's take a look at the questions that made it to the board.

Provide clues or answers to the questions on the board, or incorporate them into a homework assignment.

Livestock, just like humans, have several events and milestones in their life that help them live happy, productive lives. Without **vaccinations**, **identification**, and care, neither livestock nor humans can be productive and healthy.



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Application

Extended classroom activity:

Have a veterinarian visit the classroom and share in more detail the purpose and equipment used for the terms in today's lesson.

FFA activity:

Incorporate these terms and others from this unit into a game at an FFA activity; you could have a quiz bowl, play Guesstures or Pictionary.

SAE activity:

Have an FFA member host the students or bring in a demonstration on one or more of these practices and how they relate to their SAE.

Evaluation

MS.AS.2.4.ASSESS.A.

Answers to Evaluation

1. D
2. A
3. E
4. C
5. B



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Management Practice & Definition	Cattle	Sheep	Goats	Swine	Poultry
Castration- removing the testes to prevent unwanted breeding, leads to better meat, and results in less fighting and aggressive behavior among males	X	X	X	X	
Dehorning- to remove or prevent the growth of horns to protect humans and other animals from being injured	X	X	X		
Vaccination- administering microorganisms to increase immunity to a particular disease	X	X	X	X	X
Identification- method used to label livestock for the purpose of individual recognition Examples: ear tag, tattoo, ear notch, brands, electronic id, neck chains, nose prints	X	X	X	X	X
Docking- Removal of a portion of the tail to prevent the anus from becoming dirty possibly resulting in disease		X		X	
Teeth Clipping- clipping the needle teeth of piglets to prevent injuries to other pigs				X	
Debeaking- to remove the tip of the upper mandible to prevent cannibalism and fighting					X
Shearing- to cut or clip the hair or wool		X	X – depends on the purpose of the goat		



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Shearing- to cut or clip the hair or wool



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Management Practice & Definition	Cattle	Sheep	Goats	Swine	Poultry
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Dehorning- 					
Vaccination- 					
Identification- 					
Docking- 					
Teeth Clipping- 					
Debeaking- 					
Shearing- 					



Livestock Management Practices

Name _____

Instructions: Match the terms with the correct definition.

1. _____ Docking	A. Administering microorganisms to increase immunity to a particular disease
2. _____ Vaccination	B. To remove or prevent the growth of horns
3. _____ Shearing	C. Methods used to label livestock
4. _____ Identification	D. Removal of a portion of the tail
5. _____ Dehorning	E. To cut or clip the hair or wool