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# Managing Animal Health

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**Unit:** Animal Science and the Industry

**Problem Area:** Animal Health and Administering Veterinary Care

**Lesson:** Managing Animal Health

- **Student Learning Objectives.** Instruction in this lesson should result in students achieving the following objectives:

- 1 Identify good animal health management practices.**
- 2 Discuss beneficial record keeping programs for dairy.**
- 3 Explain common maintenance needs to promote animal health.**
- 4 Describe identification possibilities for various animals.**

- **List of Resources.** The following resources may be useful in teaching this lesson:

Corresponding E-unit(s). Danville, IL: CAERT, Inc. [www.mycaert.com](http://www.mycaert.com)

- **List of Equipment, Tools, Supplies, and Facilities**

- ✓ Copies of sample test
- ✓ Visuals from accompanying masters
- ✓ Copies of student lab sheet

■ **Terms.** The following terms are presented in this lesson (shown in bold italics):

- ▶ branding
- ▶ castrating
- ▶ dehorning
- ▶ docking
- ▶ earmarks
- ▶ heat
- ▶ mastitis
- ▶ tattooing

■ **Interest Approach.** Use an interest approach that will prepare the students for the lesson. Teachers often develop approaches for their unique class and student situation. A possible approach is included here.

*Bring in a pair of tattooing pliers and show the class. Write a number on the board that would be used in tattooing cattle (e.g., A24 or B56). Have the students attempt to write the number backwards on a sheet of paper. Ask one student to put the numbers in the tattooing pliers. Have the student with the pliers press the tattoo onto a sheet of paper. Compare the results on the paper. Ask other students to try to tattoo the correct number on the paper.*

## SUMMARY OF CONTENT AND TEACHING STRATEGIES

**Objective 1:** Identify good animal health management practices.

**Anticipated Problem:** What are good health management practices?

- I. Every type of animal needs specific management practices for good health. There are some broad similarities between some species and breeds. It is better to prevent problems before they occur. Many of the same management practices can be used for all animals.
  - A. Always make sure that you purchase your animals from a reputable person. If you start out with healthy animals, it will be less expensive and less stressful. If you start out with infected animals, you may deal with the problem for a very long time.
  - B. Obtain animals only if you have a specific use for them in mind. Bringing in new animals always presents some risk of introduction of disease and other problems.

If you are not committed to completing the necessary paperwork, do not buy animals that will require it for proper health records.

- C. Clean and disinfect all areas before bringing animals into an area.
- D. Ensure that all animals are fed properly. Many problems can be avoided with proper nutrition.
- E. Keep animals out of weather that they do not tolerate well, in order to avoid illnesses and discomfort.
- F. Keep track of sexual maturity of animals so that they are not bred at the wrong time or to the wrong mate.
- G. Monitor animals daily so that you are aware of what is normal and will notice when anything is not normal.
- H. Dispose of dead animals properly to avoid further infection.
  - I. Separate sick animals from healthy animals until you are positive the disease or parasite under control.
  - J. Call a veterinarian for any situation beyond the control of the owner or manager.

*Many techniques can be used to help students master this objective. Use VM-A to discuss proper health management practices.*

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## **Objective 2:** Discuss beneficial record keeping programs for dairy.

**Anticipated Problem:** What records should be kept to encourage good animal health with dairy animals?

- II. Animals have specific record keeping needs, depending on the species or breed, to encourage good health. Dairy animals require more paperwork than most. The breeding program of a dairy is essential to the success of the business. Common ailments in dairy cattle can be tracked and avoided with proper records of herd health.
  - A. Records of dairy animals are done on an individual basis. Each cow is monitored for pregnancy, production, and milk quality. Milking dairy cows two to three times each day at consistent times helps maintain health. Studies show that milking more frequently decreases mastitis and seems to improve general udder health. **Mastitis** is an infection of the milk-secreting glands.
  - B. Detailed records of breeding programs should be kept, including heat detection and heat cycles. **Heat** describes the time in a cow's estrus cycle when she can get pregnant. Breeding records will help to determine if there is a reproductive problem with the animal.
  - C. Good animal health requires keeping track of growth and mortality rates. By logging this information, you may notice patterns that can be addressed.

- D. Keeping records of genetic information is beneficial. There might be undesirable traits that are passed on to new generations. Genetic records can also be used to show that an animal has quality offspring.
- E. Pregnancy records need to be maintained.

*Many techniques can be used to help students master this objective. Use LS-A to practice record keeping.*

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**Objective 3:** Explain common maintenance needs to promote animal health.

**Anticipated Problem:** Simple maintenance can help to promote animal health.

- III. Proper management of common maintenance tasks can save time and money in the animal business. Many of these practices can be performed by, or with the help of, a veterinarian. Proper timing is the key to successful maintenance. Some maintenance practices are discussed here.
  - A. Dehorning of animals is common to ensure that the animals do not hurt each other, themselves, or humans. **Dehorning** is the removal of horns by use of chemicals, hot irons, saws, or other means. There are several methods of dehorning. A person should always make sure to have the proper knowledge and equipment before dehorning an animal.
  - B. **Castrating** is removing the testicles from male animals so they cannot breed. Often males are less aggressive and easier to handle after being castrated.
  - C. Docking of tails is a common practice for piglets and lambs. **Docking** is the term used to describe removing the animal's tail.
  - D. Bedding animals is a very important health management practice. Animals that have clean, dry bedding are less likely to be sick from parasites, diseases, drafts, cold, and so on. Using the proper kind and amount of bedding is essential.
  - E. Removal of manure and urine is necessary. Many diseases are passed through feces. Removing the feces will decrease the occurrence of contamination.
  - F. The animal facility should be kept free of rats, birds, and other animals that spread diseases.

*Many techniques can be used to help students master this objective. Use VM-B to discuss docking, dehorning, and castrating.*

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**Objective 4:** Describe identification possibilities for various animals.

**Anticipated Problem:** How are animals identified?

- IV. It is important to be able to tell animals apart, especially in large enterprises. By not identifying an animal, the owner will not know what animal to watch, treat, breed, and so on. This could be detrimental to the operation. There are different methods of

identification used for various types of animals. It is important to use the appropriate methods for each particular species.

- A. Cattle can be branded to establish ownership. **Branding** is the burning or freezing of a mark onto an animal to determine ownership or pedigree. Some owners brand the horns of their animals. There are four methods used:
  1. Hot iron branding
  2. Freeze branding
  3. Branding fluids
  4. Laser branding
- B. Plastic or metal ear tags are also used to identify animals. Plastic ear tags are popular, because they are inexpensive, can be installed anytime, and are numbered. Plastic tags are easier to read than metal tags. They are also brightly colored, have large numbers, and are easily read from a distance.
- C. Marking the skin with ink on needle points is called **tattooing**. This is a permanent marking but can be hard to read. Tattooing is commonly used with swine and cattle.
- D. **Earmarks** are permanent notches cut into ears of animals. This method can be done with a knife or ear notching tool. Pigs and sheep are commonly ear marked.
- E. Neck chains are sometimes used, but these chains and tags can get lost. The animal, on rare occasions, could also hang itself.
- F. Another way to identify cattle is to have them swallow a transmitter that stays in their stomach. The transmitter gives off a signal to identify the animal when activated by a receiving unit. This method is costly, but the transmitters can be retrieved and reused after slaughter.

*Many techniques can be used to help students master this objective. Use VM–C as an overhead to discuss identifying cattle.*

- **Review/Summary.** Use the student learning objectives to summarize the lesson. Have students explain the content associated with each objective. Student responses can be used in determining which objectives need to be reviewed or taught from a different angle.
- **Application.** Have the students practice record keeping skills with the provided lab sheet.
- **Evaluation.** Evaluation should focus on student achievement of the objectives for the lesson. Various techniques can be used, such as student performance on the application activities. The “Checking Your Knowledge” section at the end of the corresponding E-unit will be helpful. The sample written test can also be used.

## ■ **Answers to Sample Test:**

### **Part One: Matching**

1. f
2. d
3. c
4. a
5. b
6. e

### **Part Two: Short Answer**

- ◆ hot iron branding
- ◆ freeze branding
- ◆ branding fluids
- ◆ laser branding

### **Part Three: Completion**

1. bedding
2. castrating
3. dehorning
4. disease, parasite

# Managing Animal Health

## ► Part One: Matching

**Instructions:** Match the term with the correct definition.

- |             |              |
|-------------|--------------|
| a. branding | d. mastitis  |
| b. heat     | e. earmarks  |
| c. docking  | f. tattooing |

- \_\_\_\_ 1. Marking the skin with ink on needle points
- \_\_\_\_ 2. An infection of the milk-secreting glands
- \_\_\_\_ 3. Term used to describe removing the animal's tail
- \_\_\_\_ 4. Burning or freezing a mark onto an animal to establish ownership or pedigree
- \_\_\_\_ 5. The time in a cow's estrus cycle when she can get pregnant
- \_\_\_\_ 6. Permanent notches cut into ears of animals

## ► Part Two: Short Answer

**Instructions:** Complete the following.

What are four methods of branding animals?

## ► Part Three: Completion

**Instructions:** Provide the word or words to complete the following statements.

1. Animals that have clean and dry \_\_\_\_\_ are less likely to be sick from parasites and diseases.
2. \_\_\_\_\_ is removing the testicles from male animals so they cannot breed.
3. \_\_\_\_\_ is the removal of horns by use of chemicals, hot irons, saws or other means.
4. Separate sick animals from healthy ones until you are positive the \_\_\_\_\_ or \_\_\_\_\_ is not contagious to other animals.

# MANAGEMENT PRACTICES FOR GOOD ANIMAL HEALTH

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- ◆ Clean and disinfect boots when entering and leaving a livestock area
- ◆ Place open feed bags in clean, sealable containers
- ◆ Control insects, rodents, and wild birds in livestock area
- ◆ Isolate sick animals from the herd
- ◆ Clean water and feed troughs
- ◆ Locate compost piles for used bedding away from animals
- ◆ Clean and disinfect pens between groups of animals
- ◆ Disinfect shovels, brooms, and cleaning tools
- ◆ Call for the assistance of a veterinarian when necessary



# DEHORNING, CASTRATING, AND DOCKING

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- ◆ Dehorning—Removing an animal’s horns by use of chemicals, hot irons, saws, or other means; common practice to ensure that animals do not hurt each other, themselves, or humans
- ◆ Castrating—Removing the testicles from male animals so they cannot breed; often males are less aggressive and easier to handle after being castrated
- ◆ Docking—Removing an animal’s tail; common practice for piglets and lambs

# METHODS OF IDENTIFYING BEEF AND DAIRY CATTLE

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- ◆ Branding
- ◆ Hot Iron
- ◆ Freeze Branding
- ◆ Branding Fluids
- ◆ Laser Branding
- ◆ Plastic or Metal Ear Tags
- ◆ Tattooing
- ◆ Earmarks (Notches)
- ◆ Neck Chains
- ◆ Transmitters

# Basic Record Keeping

## Purpose

Practice record keeping.

## Procedure

1. Choose a subject on which to keep a record. Record events, expenses, time, and so on in the space provided. It could be a record of what you eat, where you go, your homework, or your exercise routine. A good subject would be a family pet, if one is available.
2. Each day, write down what happened, how long your event took, and anything unique about it to get a brief idea of the commitment record keeping takes. You may use the table provided to keep your records.

## Subject:

Day	Events	Time	Unique Occurrences
1			
2			

Day	Events	Time	Unique Occurrences
3			
4			
5			
6			
7			