

Lesson B2–7

Exploring the Rabbit Industry

Unit B. Animal Science and the Industry

Problem Area 2. Identifying and Understanding the Segments of the Animal Science Industry

Lesson 7. Exploring the Rabbit Industry

New Mexico Content Standard:

Pathway Strand: Animal Systems

Standard: I: Apply knowledge of anatomy and physiology to produce and/or manage animals in a domesticated or natural environment.

Benchmark: I-A. Use classification systems to explain basic functions of animal anatomy and physiology.

Performance Standard: 1. Describe functional difference in animal structures and body systems. 2. Classify animals according to anatomy and physiology.

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

1. Describe common breeds of rabbits.
2. Discuss production and marketing of rabbits.
3. Identify rabbit anatomy.
4. Explain how to fit and show rabbits.

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

Recommended Resources. One of the following resources should be selected to accompany the lesson:

Gillespie, James R., *Modern Livestock and Poultry Production*. Albany, New York: Delmar. 2002 (Textbook Unit 47)

Ensminger, M. E., *Animal Science*. Danville, Illinois: Interstate Publishers, Inc. 1991

Other Resources. The following resources will be useful to students and teachers:

Cooper, Elmer L., Burton, DeVere L., *Agriscience Fundamentals and Applications*. Albany, New York: Delmar. 2002 (Textbook Unit 29)

List of Equipment, Tools, Supplies, and Facilities

Writing surface
Overhead projector
Transparencies from attached masters
Copies of student lab sheet

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

Angora fur
Bucks
Does
Fryer
Litter
Normal fur
Pelt
Rex fur
Roasters
Satin fur

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

Before you begin rabbit unit, make a display in your room of rabbit breeds. Use the board to spark interest and for reference.

Summary of Content and Teaching Strategies

Objective 1: Describe common breeds of rabbits.

Anticipated Problem: What are common breeds of rabbits?

- I. Regardless of the breed, all rabbits should be purchased from a reputable breeder and evaluated on health, reproduction ability, longevity, and vigor. The American Rabbit Breeders Association (ARBA) recognizes 42 different breeds.
 - A. Breeds are broken down into four different fur types.
 1. The first breed type based on fur is called normal. **Normal fur** has long guard hairs that protect a dense undercoat.
 2. The second type is satin. **Satin fur** has luster, is composed of transparent hair, and is finer than normal fur.
 3. **Rex fur** has a very soft feel because it is very dense and the undercoat and guard hairs are the same length.
 4. The final fur type is angora. **Angora fur** is used to manufacture clothing because of its long wool-like fiber.
 - B. There are several different breeds of rabbits. Before selecting what kind to produce you should consider your available space, time, and production goals. Here are some commonly used examples.
 1. The Californian is a white rabbit with colored nose, ears, tail, and feet. At maturity Californians weigh between 8 and 11 pounds and are used for meat and show.
 2. The Checkered Giant has a white body with black ears, nose, and circles around the eyes. Checkered Giants also have black spots on the hindquarters, cheeks, and sides of their bodies. At maturity they weigh over 11 pounds and are used for showing and for their fur.
 3. The New Zealand is completely white, red, or black and weighs between 9 and 12 pounds. New Zealands are used for research, shows, and for their meat.
 4. The Dutch rabbit can have a black, blue chocolate, tortoise, or gray body. Dutch rabbits also have a white band over their shoulder, under their neck, and over their front legs and hind feet. They are used for research, meat, and shows. At maturity they weigh between 5 and 8 pounds.

Use TM: B2–7A as a handout or overhead to discuss rabbit breeds.

Objective 2: Discuss production and marketing of rabbits.

Anticipated Problem: What are production and marketing options when raising rabbits?

- II. Rabbits are used for production, research, and as pets. There are many production options to consider and marketing options for each.
 - A. Meat rabbits are raised as fryers or roasters. A **fryer** is a young domestic rabbit carcass that weighs over 1½ pounds and under 4 pounds and is usually under 12 weeks old. **Roasters** are rabbits that are heavier than fryers or cull animals from the breeding herd. To successfully raise rabbits for meat, you must assess the amount of feet required to produce the rabbit weight required. Most commercial operations sell fryers and roasters to processors. The processors slaughter the rabbits and market the pelts and meat. Colored pelts are not worth as much as pure white ones, so most growers only raise white rabbits. Some producers slaughter and market the rabbits they grow, but they must follow the same strict sanitation and slaughtering regulations as large processors.
 - B. Rabbits are also used to produce wool. Angora rabbits are used because their wool grows 2½ to 3½ inches long and can be harvested at a rate of 1 inch per month. On average angora rabbits shear 14 to 15 ounces annually. In order to raise angora rabbits successfully, you must keep the rabbits' environment clean and harvest wool often. Since the price for rabbit wool is low, it is a good idea to raise your animals for both wool and meat. Marketing of the wool is done through selling it for use in clothing.
 - C. Rabbits are also used for their skins. The pelts are usually marketed by the pound and bought by raw-fur buyers. A **pelt** is an animal's skin that still has the hair attached. Skins must meet requirements and therefore should not be cut or mutilated by over stretching or drying.
 - D. Rabbits raised for pets or 4-H and FFA projects are usually grown by small producers. Rabbits can be raised outside or inside your house. Marketing of rabbits raised for pets is usually done locally.

Objective 3: Identify rabbit anatomy.

Anticipated Problem: What differs rabbits from other mammals?

- III. All domestic rabbits are descendants of wild rabbits. They are found throughout the world and can become nuisances because of their eating habits and rapid reproductive ability.
 - A. The anatomy of wild and domesticated rabbits is the same. Refer to TM: B2–7B for the parts.
 - 1. Male rabbits are called **bucks**.
 - 2. Female rabbits are called **does**.
 - 3. A group of young rabbits born at one time is called a **litter**.

Use TM: B2–7B as a handout or transparency to identify the parts of a rabbit.

Objective 4: Explain how to fit and show rabbits.

Anticipated Problem: How do I fit and show rabbits?

- IV. When raising rabbits for 4-H and FFA you may be interested in showing them at local and state shows to help develop your project. Shows are an opportunity to compete and also to learn more about other breeds and management options. It is also interesting to see how your rabbits compare to those raised by other people.
- A. Shows are found all across the U.S. They range from small local events to state fairs. Your rabbit will be judged on the same qualities at all types of shows, such as breed characteristics, variety characteristics, fur condition, health, ability of animal and owner to present qualities.
 - B. Shows are set up so similar breeds compete against each other. The breed classes are further broken down into age and sex groupings.
 - C. It is important to keep show animals tame and clean so they can be handled without injury to the animal or owner.

Use TM: B2–7C to discuss important qualities needed for shows.

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 to determine which objectives need to be reviewed or retaught with a different approach. Questions provided in the recommended textbooks may also be used to help review.

Application. Application can involve student activity with the provided labs.

Evaluation. Evaluation should focus on student achievement of the objectives for each lesson. Various techniques can be used, such as performance on the application activities. A sample written test is attached.

Answers to Sample Test:

Part One: Matching

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

Part Two: Completion

1. fryer
2. pelt
3. Roaster
4. Satin fur

Part Three: Short Answer

Your rabbit will be judged on the same qualities at all types of shows:

1. Breed characteristics.
2. Variety characteristics.
3. Fur condition.
4. Health.
5. Ability of animal and owner to present qualities.

Test

Lesson B2–7: Exploring the Rabbit Industry

Part One: Matching

Instructions. Match the term with the correct response. Write the letter of the term by the definition.

- | | | |
|---------------|------------|---------------|
| a. Angora fur | c. Rex fur | e. Normal fur |
| b. Bucks | d. Does | f. Litter |

- _____ 1. Male rabbits.
- _____ 2. Female rabbits.
- _____ 3. A group of young rabbits born at one time.
- _____ 4. Long guard hairs that protect a dense undercoat.
- _____ 5. Used to manufacture clothing because of its long wool-like fiber.
- _____ 6. Has a very soft feel because it is very dense and the undercoat and guard hairs are the same length.

Part Two: Completion

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

1. A _____ is a young domestic rabbit carcass that weighs over 1 ½ pounds and under 4 pounds and is usually under 12 weeks old.
2. A _____ is an animal's skin that still has the hair attached to it.
3. _____ are rabbits that are heavier than fryers or cull animals from the breeding herd.
4. _____ has luster, is composed of transparent hair and is finer than normal fur.

Part Three: Short Answer

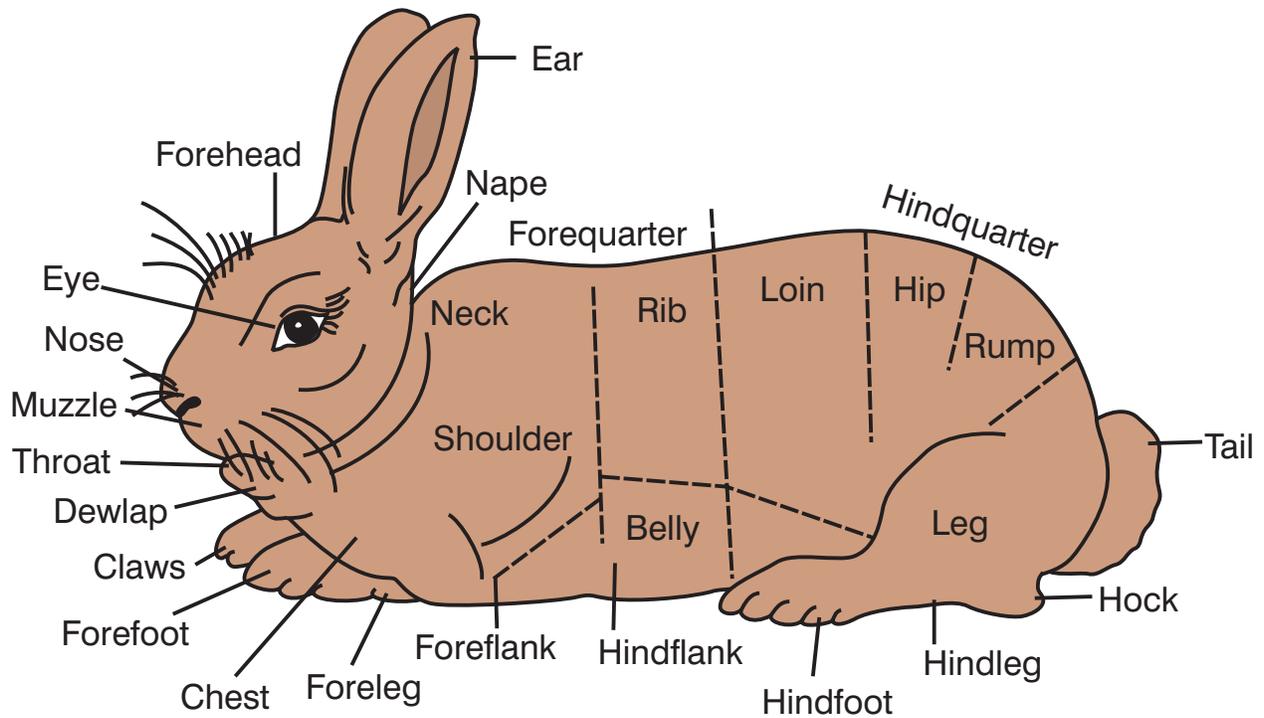
Instructions. Provide information to answer the following question.

What are four things that your rabbit will be judged on at all types of shows:

COMMON RABBIT BREEDS

Breed	Color	Mature Weight (pounds)	Major Uses
Californian	Body white; nose, ears, feet, and tail colored.	8–10.5	Meat and show
Champagne d'Argent	Under fur dark slate blue; surface fur blue, white, or silver; liberal sprinkling of long black guard hairs.	9–12	Meat and show
Checkered Giant	Body white; black spots on cheeks, sides of body, and hindquarters. Wide spine stripe. Ears and nose black with black circles around the eye.	11 and over	Show and fur
Dutch	Body black, blue, chocolate, tortoise, steel gray, or gray. White saddle or band over the shoulder, under the neck, and over front legs and hind feet.	3.5–5.5	Show and laboratory
English Spot	Body white with black, blue, chocolate, tortoise, lilac, gray, or steel gray spots. Spots on nose, ears, cheeks; circles around eyes. Spine stripe from base of ears to end of tail. Side spots from base of ears to middle of hindquarters.	5–8	Meat, show, and laboratory
Flemish Giant	Body steel gray, light gray, sandy, blue, black, white, or fawn.	13 and over	Meat and show
Himalayan	Body white; nose, ears, feet, and tail colored.	2.5–5	Show and laboratory
New Zealand	Body white, red, or black.	9–12	Meat, show, and laboratory

PARTS OF A RABBIT



HIGH PLACING RABBIT QUALITIES FOR SHOWS

- 1. Breed characteristics.**
- 2. Variety characteristics.**
- 3. Fur condition.**
- 4. Health.**
- 5. Ability of animal and owner to present qualities.**

Lab Sheet

Purpose:

To collect pictures of rabbits and rabbit products.

Procedure:

Use old newspapers and magazines to obtain appropriate pictures. Create a collage on a bulletin board with all the pictures collected.