

Rabbit Anatomy and Quality Characteristics

WHEN YOU look at a rabbit, do you wonder what characteristics determine a high-quality rabbit versus a low-quality one? Much value is placed on the correctness of the animal's anatomy and size. Thus, producers need to understand rabbit anatomy as well as the areas of value. Explore this E-unit to learn the anatomical parts and some techniques of showing rabbits.



Objectives:



1. Identify the rabbit's outer anatomy.
2. Define quality characteristics of show rabbits.

Key Terms:



bucks
dewlap
does

forequarter
hindquarter
litter

lop
nape

Outer Anatomy

All domestic rabbits are descendants of wild rabbits. Wild rabbits are found throughout the world and can become nuisances because of their eating habits and rapid reproductive ability. However, the anatomy of wild rabbits and domesticated rabbits is identical.

Male rabbits are identified as **bucks**, whereas female rabbits are called **does**. A doe produces a **litter**, which is a group of young rabbits all born at the same time.

The anatomy of a rabbit is similar to that of many other species. A rabbit has ears, a nose, a tail, and feet. However, the structure and placement of some of the rabbit's body parts make it unique. For example, a rabbit has long, slender ears with hair covering the skin. It can have

either erect ears, which stand up, or **lop** ears, which flop down. Many breeds have lop ears as a standard characteristic.

The eyes are usually wide and clear. Some breeds have distinctive eye color, like black, blue, or even red.

A rabbit also has a small, soft nose with whiskers around the nasal area. The animal's muzzle, or mouth, is best suited to $\frac{1}{8}$ - to $\frac{3}{16}$ -inch pellets or to hay.

A rabbit has a **dewlap**, which is a spot of excess fur under the muzzle. The female has a much larger dewlap than the male. It is from the dewlap that she pulls fur for nesting her babies at night.

The rabbit also has a **nape**, which is loose skin between the ears and the neck. When picking up a rabbit, the producer grasps the animal by its nape while gently encircling its feet.

A rabbit has four legs. The two in the front are called the forelegs, and the two in the rear are called the hind legs. Similarly, the front feet are identified as the forefeet, and the rear feet are identified as the hind feet. The feet have claws and are covered with hair and fur. Generally, the hind legs are bigger than the forelegs to aid in hopping. Muscling in the hind legs is much more extensive than in the forelegs.

A rabbit's body is broken into two sections called the forequarter and the hindquarter. The **forequarter** consists of the neck, shoulder, foreflank, and ribs. The **hindquarter** consists of the hind flank, belly, loin, hip, leg, and rump. Rabbits raised for meat production are often bred to have top-quality forequarters and hindquarters. A rabbit has a bushy tail on its rear that often resembles a piece of cotton.

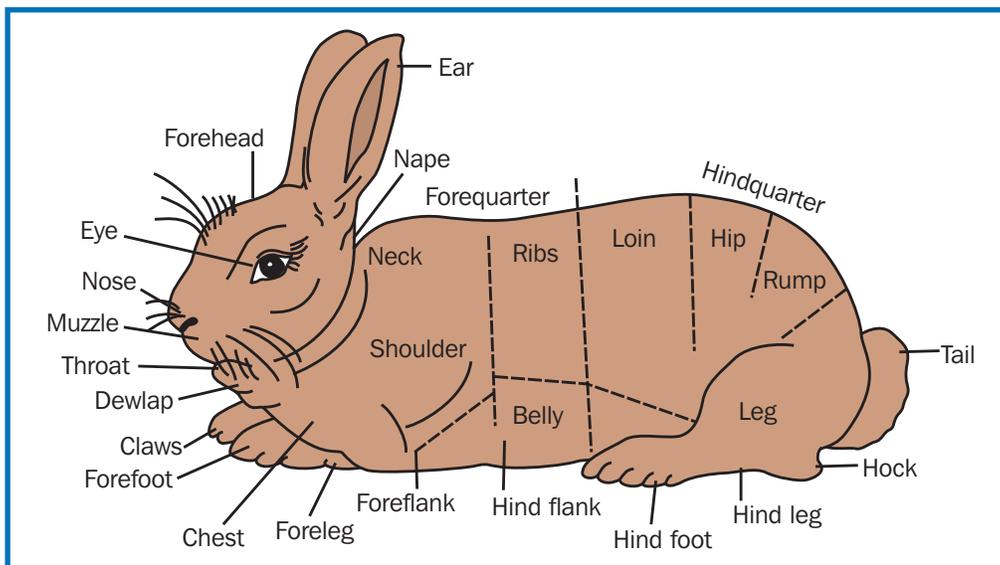


FIGURE 1. Outer anatomy of a rabbit.

Showing Rabbits

When raising rabbits for 4-H or FFA, you may want to show them at a local or state show to help develop your project. Shows offer an opportunity to compete and to learn more about



ON THE JOB...

CAREER CONNECTION: Rabbit Judge

For breeders to be identified as “quality” breeders, they must have rabbits that are evaluated as top tier. These breeders often travel all over the country, and even the world, to show their rabbits for titles and cash prizes. Because of this demand for reputation in the breeding-stock world, the shows employ judges. These judges are reputable people in the rabbit business. Often, retired breeders for specific breeds are asked to judge because they are not competing, yet they are experienced. University and extension representatives will sometimes judge rabbit shows.

Rabbit judges make anywhere from \$100 to \$1,000 a show, depending on the circumstances of contention and time. These shows usually pay for travel and lodging for the events. Judging rabbits can be viewed as more of a part-time job or as a hobby. Overall, the judges do not need any formalized education, but they do require both extensive knowledge of rabbit breed standards and experience of the industry. To make a profit, these judges must be willing to travel great distances and be accountable for their decisions.

other breeds and management options. Seeing how your rabbits compare with those raised by other people is also interesting. Shows are found all across the United States. They range from small local events to state fairs.

At all types of shows, your rabbit will be judged on the same qualities, such as breed characteristics, variety characteristics, fur condition, health, and ability of the animal and the owner to present the qualities. Shows are set up so similar breeds compete against each other. The breed classes are further broken down into age and sex groupings.

When showing a rabbit, keep the animal calm at all times. Often, a breeder will rest his or her hands over the face of a rabbit to cover its eyes. If the rabbit is used to this and associates it with a positive feeling, the rabbit will remain calm. If the rabbit does not remain calm, both the animal and the handler can be injured. The claws of a rabbit’s hind feet can be very sharp and cause major scratches and cuts.

During shows, rabbits should be clean and free of dirt and excess matter. A rabbit should have its hindquarter arched during a show to resemble a halved basketball. This is to illustrate the depth of the hindquarter for carcass quality. In addition, forelegs and hind legs should be tucked, and ears should be properly placed. The ears of a lop breed should be laid directly over the forefeet. The ears of other breeds should be erect at all times.

Summary:



Rabbits are unique animals with specific characteristics required for breed production. Rabbits raised for meat production are often bred by producers to have top-quality forequarters and hindquarters, whereas those intended as stock rabbits are more often bred for specific breed traits, such as ear placement and eye color.

When showing a rabbit, the breeder must be aware of ways to make the rabbit feel calm. In addition, the breeder must arch the rabbit's hindquarter, as well as correctly place the rabbit's ears, forelegs, and hind legs.

Checking Your Knowledge:



1. What is the dewlap, and what special purpose does it serve in the female rabbit?
2. List the components of a rabbit's forequarter and the components of its hindquarter.
3. Name some characteristics on which rabbits will be evaluated at rabbit shows.
4. How are classes divided at rabbit shows?
5. Why should a rabbit have its hindquarter arched when being shown?

Expanding Your Knowledge:



Research the various rabbit breeds. Compare and contrast the changes in rabbit fit and show for various breeds. Are different breeds fitted differently? Do certain breeds have erect ears and others lop ears? Do the hindquarters of different breeds differ in length? Does one show differentiate genders of rabbits? Record your research in a one-page response.

Web Links:



Breeding Rabbits

<http://www.debmark.com/rabbits/breeding.htm>

Purina Mills, LLC

http://www.showchow.com/rabbit/index_rabbit.html

The Rabbit Research Center at TAMUK

<http://users.tamuk.edu/kfsdl00/rabb.html>

Agricultural Career Profiles

<http://www.mycart.com/career-profiles>