

Rabbit Basics for the Beginner

Contributing Authors: Jeff Dick, David Mangione, Barbara Parker Phares, and Travis West Extension Educators, Ohio State University Extension

Introduction—Core Purpose and Learning Objectives

Rabbits are a popular project for younger 4-H members or those members who do not have the facilities or space for a larger animal species. Basic background information about raising and caring for rabbits will assist in making your endeavor into rabbit ownership a success.

Core Purpose:

To gain an understanding of the general information needed to raise a rabbit.

Learning Objectives:

- Effective selection of a rabbit project animal
- Determine appropriate housing for a rabbit
- Ensure proper animal care for your rabbit
- Provide proper health and nutrition for your rabbit

Selection

Selecting a breed of rabbit can be a huge challenge for first-time rabbit owners. There are currently 48 breeds of rabbits recognized by the American Rabbit Breeders Association (ARBA). As a 4-H member, you should familiarize and research several breeds to determine those meeting the criteria you have for your rabbit project. There are market fryers, breeding rabbits, or companion pet rabbits. The goals you have for your rabbit project have a large effect on the breed you choose to purchase. If you are interested in exhibiting breeding rabbits or raising rabbits, it is important to have a copy of the Standard of Perfection for your breed. This publication describes the ideal rabbit for each recognized breed, and is the standard by which judges compare rabbits of the same breed against

one another. If you are raising rabbits, you need to understand the process of culling.

Culling is removing a rabbit from the herd because of inferior production, inferior quality when compared to the Standard, or possessing specific disqualifications. Your criteria for culling might be different depending on whether you are focusing on breeding, pet, or market projects.

Market rabbits should be of a commercial breed and fall into one of the following three categories:

- Fryers: 3½–5 pounds (8–10 weeks of age)
- Roasters: 5–8 pounds (not over 5 months)
- Stewers: over 8 pounds (over 5 months)

Make sure you understand the requirements of your fair for exhibition of your market rabbit project. Some projects will require you to have one to three rabbits as part of your project. If your project includes more than one market rabbit paired with another, then you want to find two or three rabbits that are identical in type. Rabbits in the fryer and roaster categories can be expected to gain approximately 7 ounces per day if provided adequate feed and water on a daily basis. Weighing your market rabbits is important to make sure you are on track to obtain the desired weight at the end of your project.

Housing (Environment)

Housing can be evaluated with a few factors: ventilation, size, material, temperature, and protection. Ventilation is the process of moving air above and below the cage to decrease temperature and ammonia odor,



which can be damaging to a rabbit's respiratory system. This can be accomplished naturally or mechanically, but you must ensure that direct drafts are not imposed on the rabbits. The ideal temperature for an adult rabbit's environment is 45–70° Fahrenheit.

Housing for rabbits can be maintained either inside or outside a physical structure. Outside facilities require that the rabbits be protected from the weather and predators. Inside housing provides more control of the environment, including better biosecurity, but comes with more expense and more ventilation challenges. It is necessary for you to determine the housing plan that fits the current situation you have at home.

Cage size is detailed in the Animal Welfare section in this fact sheet and gives the specific recommendations for the size of rabbit and its use. There are numerous materials that can be utilized to build rabbit cages; however, remember that rabbits are gnawers, meaning they will eat building materials. The material used will depend on whether you have an inside wire cage or an outside cage. The outside cage typically includes (three) plywood or pressed board (sidewalls) and roof to provide necessary protection for the rabbits. Inside cages will usually be constructed from galvanized welded wire.

General Care and Management

Nutrition

Consideration for appropriate nutrition depends upon the stage of production, added supplements, environmental temperature, quality of pellets, and access to water. Crude protein (CP) is the major nutrient we assess because the fiber is fairly consistent in most commercially produced rabbit pellets. Crude protein feed recommendations are 16–18% for growing market rabbits; 14–16% for maintaining body weight on mature rabbits (non-breeding stock); and 16–18% for stock in active breeding.

The most important nutrient you can provide your rabbit is water. Access to fresh, clean

water is necessary for rabbits to maintain proper growth rate and body condition. Fresh, clean water is a must during the summer months, because rabbits do not tolerate heat well and depend on water to cool their bodies. Many people insist on feeding supplements to their rabbits. Commercially produced rabbit pellets provide a complete diet for rabbits. When you add supplements on a daily basis, you are altering the balanced diet provided by the pellets. Supplements should be used carefully or used as an occasional treat for your rabbits in order to minimize their effect on the balanced diet.

Rabbits are unique in the fact that they are susceptible to digestive disturbances. To lower this susceptibility, they use a process called cecotrophy to maintain balance in their digestive system. Cecotrophy is the process of ingesting feces, typically done at night. The ingestion of the soft feces, or cecotropes, increases protein digestibility and energy digestion for the rabbit.

Health/Vaccinations

Rabbits are typically low-maintenance animals when it comes to health and vaccinations. There are no vaccinations that are recommended for rabbits, and just a few medications that are actually labeled for use on rabbits. Healthy rabbits have a normal temperature range of 101.3–104.0° Fahrenheit, a resting heart rate of 180–250 beats/minute, and a constantly moving nose. Most veterinarians do not have much experience with treating rabbits. This requires you as the owner to become familiar with signs of common diseases and ailments. Your observation will be integral for maintaining health among your rabbits on a daily basis. The Rabbit Resource Handbook provides more in-depth details on certain diseases and ailments: lice and mites (mange), enteritis, coccidiosis, worms, abscesses, URI—Upper Respiratory Disease, wry neck, vent disease, and pasteurella. If you think your rabbit needs medication, consult your veterinarian to determine the appropriate medication and

dosage level.

Rabbits have a sympathetic nervous system, which is primarily responsible for stimulating the body's flight-or-fight response. This creates a real challenge in determining the correct dosage of medication needed for a sick rabbit. Providing too much medication (overdosing) is toxic. Underdosing, or giving too little medication, is ineffective at treating the condition. There are four administration routes that can be utilized in rabbits. They include oral, subcutaneous (nape of neck), intravenous (veins in feet), and intramuscular (hind leg or back muscle). ARBA has a Rabbit and Cavy Health Committee that can field questions about doctoring rabbits.

Animal Welfare

Pen and Cage Size

The size of the cage should be determined by the size and function of the rabbit. A common rule of thumb is that a cage should be 0.75 square feet of floor space (9" x 9") per pound of mature body weight. For example, a rabbit that should reach 11 pounds as an adult should have a cage 30" x 30" (9" x 9" x 11 lbs = 891"). The cage height should be high enough that in no way should the rabbit's ears rub on the top of the cage when the rabbit is moving and the ears are erect. Additional floor space should be provided for does that are going to be producing babies or multiple animals in a single space. The size of the door should be of adequate size to properly remove your rabbit from the cage. Cages should be constructed with fourteen or sixteen gauge welded wire. A 1" x 1" or 1" x 2" wire (size of squares) should be used for the outside and top of the cages. Wooden floors (hutches) or ½" x 1" welded wire should be used for the bottom of the cages. "J" clips or "C" rings should be used to fasten wire to wire, and fence staples should be used to fasten wire to wooden frames.

Handling

Rabbits are light-boned animals. Because of this, improper handling can easily injure a rabbit. Rabbits should be handled from a

young age, after weaning, and handled often. Never pick up a rabbit by its ears, by the skin on the back, or by the scruff of the neck. Doing so can injure the rabbit and damage flesh condition. The proper way to pick up a rabbit is demonstrated in the Rabbit Resource Handbook. Rabbits are easily frightened and may react differently in an unfamiliar situation. A very tame rabbit at home may become stressed and frightened at a show. Never place the rabbit near your face! A rabbit's toenails can scratch deeply.

Transportation

Rabbits should travel in cages specifically designed for them. Purchase a rabbit carrier that is the correct size for the age and breed of your rabbit. Do not transport a rabbit in a box! A rabbit can become overheated easily and die quickly as a result. Hot weather conditions can be dangerous for a rabbit. It is best to place rabbits in an air-conditioned vehicle for transport. If this is not possible, keep windows rolled down and air circulating. For long-distance travel, rabbits should be in carriers and covered with large sheets of cardboard or similar items to block the sunlight. A thin sheet of foam placed under the cages will help cushion the ride, keeps cages from slipping or tipping, and protects the car's interior. Place an absorbent, generous quantity of bedding or a canine house-training pad in the bottom of the carrier tray to help absorb any wastes or spilled water. Secure water and feed pans inside the carrier. There are specially designed pans for carrier use. To avoid spillage, provide only a small amount of water during transport. Most rabbits will not eat or drink during a ride. If stopping, be certain to keep the vehicle cool. Park in a shaded area or keep the car's air conditioning operating. If cool outside, roll down windows. Handling rabbits during transport can heighten stress resulting in increased body temperature. Secure cage doors with zip ties. Carry your own water from home as changing water sources can upset the rabbit's digestion. Watering the rabbit through the carrier is

easily accomplished by using a houseplant watering can with a narrow spout. If taking several rabbits on a journey, invest in a wheeled cart on which the carriers fit easily. Many types of these carts are available.

Resources/Links

American Rabbit Breeders Association:
arba.net

Citations

Cheeke, Dr. Peter. (2009). Nutritional Management of Rabbits and Principles of Rabbit Nutrition. Rabbitcon 2009, San Diego, California, October 31–November 1, 2009.

Hayhow, Dr. Chris DVM. (2003). Care of the Domestic Rabbit. Leawood: Leathers Publishing. pp. 15–30, 38–40, 49–52, and 77–114.

Hreiz, Jay E., DVW. (2009). Practical Health Care for the Rabbit Breeder. Rabbitcon 2009, San Diego, California, October 31–November 1, 2009.

Miller, Lucinda, Jeff Dick, Bridget Weigly, Judy Conrad, David Mangione, Donna Maruschak, and Doug Dill. (2004). Rabbit Resource Handbook. Columbus: The Ohio State University.

Williamson, Dr. Scott. (2009). Making Better Rabbits through Environmental Management. Rabbitcon 2009, San Diego, California, October 31–November 1, 2009.