

4-H BREEDING RABBIT PROJECT

LEADER START UP GUIDE

Raising breeding rabbits to show and expand your colony/herd can be one of the most rewarding projects a youth can do. Breeding rabbits is an ideal project for youth who want to show and raise their own animals but may not have the ability or the space to raise large animal livestock. Rabbits require smaller living spaces and less start up costs. However, a successful breeding rabbit project takes just as much time and effort as any livestock breeding project. Raising baby kits can be very easy or complex depending on how good of a mom the doe is.

Leader Objective

- Help 4-H members learn about breeding, raising, caring for, and showing rabbits.
- Share 4-H breeding rabbit project materials and other rabbit resources with members.
- Work with members to complete 4-H Breeding Rabbit Project requirements.
- Hold a minimum of 6 project specific club meetings.
- Promote personal development opportunities for members.

Project Length

- Ownership: Year Round
- 4-H Project: Varies (3 months-year round)
 - This will be determined by how many litters you want each year.



Photo by Jessie Hadfield

Common Breeds

- Any purebred breed will work for this project.
- There are 50 recognized ARBA Breeds to work with.
 - Holland Lops
 - Rex/Mini Rex
 - New Zealand
 - Jersey Woolly
 - Plus More

Selection

Things to consider when selecting rabbits for breeding:

- What breed or breeds do you have the most interest in?
 - Once you have determine the breed(s) you want to raise be sure to get your start up breeding stock from a reputable breeder.
- Other than breeding what do you want to raise rabbits for? This will better help to determine what breeds you should raise.
 - Show, Meat/Commercial, Pelt/Fur, Pets
- How many litters do you want per year?
 - According to the American Rabbit Breeders Association (ARBA) a doe that is bred more often generally has a higher conceiving rate.
- Color- Are there certain colors within the breed you are wanting to raise?
 - Check ARBA's Standard of Perfection to see what colors are recognized in your breed(s).
- Price- purchasing breeding stock will be an investment up front. Do your research amongst the breeders that raise the breed(s) you want. Look to see if their stock is proven and do price comparisons.



Avoid hobby breeders who are merely trying to breed rabbits for the fun of it, and often overlook basic rabbit husbandry needs. The term “backyard breeder” is sometimes used to describe these breeders, but the size or location of a breeder’s herd does not matter, as long as the breeder follows best practices. If you need help finding reputable breeders, reach out to your local Extension office. You can also find reputable breeders through ARBA’s website: <https://arba.net/recognized-breeds/> and through the Beehive State Rabbit Breeders Association.

If you find a breed that catches your eye, you can do some more research to find out if that breed is a good fit for the goals you are wanting to accomplish with your rabbit(s). When researching these breeds, keep in mind that small rabbits, like the Netherland Dwarf or Polish, are often higher energy and more fragile than large ones. Large rabbit breeds, such as the Flemish Giant, tend to be more docile, but may also be harder for a small child to handle and care for. Although wooly breeds like the Angora, American Fuzzy Lop, or Jersey Wooly are all very cute, their hair requires much more maintenance than a smooth coated rabbit. Therefore, more research will need to be done to understand how to properly breed, raise, and care for them.

Nutrition/Daily Feed Care

Your rabbit needs a well-balanced diet of protein, fiber, fat, vitamins and minerals (American Rabbit Breeders Association, Inc., 2020). There are many options when it comes to selecting commercially prepared feed. To begin, it is always a good idea to read the label. When selecting feed, the protein levels should range from 14%-18%. Feed that contains 18% protein does not stay fresh as long and often times has to be special ordered. This is a guide to go by; however, this number also weighs heavily upon the purpose of your rabbit project. Doing research will enable you to make the best decision for your rabbit breed and what you want to accomplish with your rabbit(s). This is also why it is recommended you talk with other rabbit breeders that raise the same breed as yourself about their feeding program.

Nutrition Facts		
Fiber	Fat	Calcium
12%-22%, not less than 18%	3% or less	Less than 1%

Pregnant/Nursing Does and Kits

- Require more feed
- The energy demand is considerably higher for rabbits during the growth stage, gestation and lactation.
 - Sources of Energy:
 - High Quality Legume Hay
 - Supplemental Concentrates
 - Heavy Grain
 - Milk Products
 - Fats
 - Sugar Products



Photo by Jessie Hadfield



Other Feeds

- Grass Hay: is considered a roughage that is a great treat for rabbits to munch on. It helps to reduce blockages and is great for their digestive track. It is recommended to give hay pellets at night and actual hay in the morning, 12 hours later. If you only give hay pellets at night, that will be just fine.
 - NOTE: It is not recommended to feed rabbits alfalfa hay due to it being too high in protein.
- Treats: Rabbits can be given treats from time to time. It is not something you want to do on a regular basis. Some treat ideas are: apples, oranges, carrots, grass clippings, etc. Do not feed iceberg lettuce and cabbage because they can cause diarrhea.
- See the Nutrition Guide for Rabbits for a complete list of foods that rabbits can – and cannot – eat. https://digitalcommons.usu.edu/extension_curall/2133/.
- Rabbits should also have access to salt licks and materials to chew, as teeth grow continually and are worn down with chewing. Pruned branches or store-bought wooden rabbit toys are good options. These items will help keep teeth at an appropriate length, and many rabbits find them entertaining as well.

Changing Feed

- Occasionally you may find it necessary to change the feed or introduce a different type of feed into your rabbit's diet. Introduce it slowly by mixing the new feed into the old feed. It is best to start with a $\frac{1}{4}$ to $\frac{3}{4}$ ration mixture. Then $\frac{1}{2}$ and $\frac{1}{2}$, then completely switch over to the new feed. Do each ration for about 3-4 days before switching the next ration. The whole period will be about 1 $\frac{1}{2}$ - 2 weeks. Rabbit digestive tracts are sensitive and will shut down if changes are introduced too rapidly.

How Much to Feed Your Rabbit		
Small Breeds	Medium Breeds	Large & Giant Breeds
2-3 ounces of pellets per day	3.5-4 ounces of pellets per day	4-8 ounces of pellets per day

How Often to Feed Your Rabbit

- A regular feeding schedule is important. Rabbits are a nocturnal animal so it is better to feed them in the evenings. Try to feed your rabbit the recommended amount of feed at the same time each day. Example: 6:00 p.m. each night. Remember to check your rabbit(s) at least morning and night.

Important Feed Reminders & Tips:

- Do not over feed your rabbit(s)
- Keep your feed dry and insect free
- Rabbits that are free fed tend to eat too much and become overweight.
- ARBA recommends that the amount of feed given is what your rabbit will consume 20-30 minutes after feeding.

To determine if your rabbit is eating enough, check the flesh condition of the rabbit. This is done by feeling the hindquarters. The ribs and backbone should not be protruding and should be well rounded. Backbones and hips, which protrude out, indicate the rabbit is too thin. Adjust feed as needed to increase weight. You can also weigh your rabbit on a scale to see if it falls within the weight limits of its breed. Check this in the Standard of Perfection book (American Rabbit Breeders Association, Inc., 2020), under your specific breed.



Housing/Facility Preparation

When planning your rabbitry (housing facilities), you must evaluate the following: ventilation, temperature, humidity, lighting, cage size, materials, and protection (Dick, Mangione, Phares, & West, 2016).

Ventilation

Is the process in which the air is able to flow throughout your structure. If adequate ventilation is not provided, then you run a higher risk of exposing your rabbits to common respiratory problems such as pneumonia and “snuffles.” The only way to keep these problems from spreading to the rest of your colony or herd is to have a proper ventilation system. Your ventilation system can be Mother Nature herself or a manmade system.

Temperature & Humidity

Rabbits can be housed anywhere from being in a cage in a utility room, to being in a cage under a tree, to a climate controlled rabbitry. Wherever they are housed, you must be sure that they are not exposed to high temperatures or high humidity for long periods. If this happens, a rabbit will collapse and become weak. During the summer, there are ways to help keep your rabbits cool if they are not in a climate-controlled structure. You can take plastic bottles, fill them with water, and freeze them. During the hot parts of the day, place a frozen bottle in your rabbit’s cage. They will lay against it and use the bottle to help keep them cool. A rabbit’s ears are their air conditioning system. You can also place a wet rage in their cage for them to lay on. A wet rage will not last as long as a frozen water bottle. Even though a rabbit cannot handle hot weather, they can withstand very cold weather as long as they don’t get wet. If they get wet, they can get sick.

Lighting

Rabbits must also be exposed to the right amount of light. Sufficient lighting helps to prime a rabbits coat and is also needed for proper breeding. If a doe (female rabbit) is not exposed to 16 hours of light each day, her receptiveness to be bread decreases. In addition, you need sufficient lighting so that you can be sure to see your way around your rabbitry.

Cage Size & Quantity

The size of cage you will need, will depend on the breed of rabbit you have and its size (American Rabbit Breeders Association, Inc., 2020). You will need to be sure to have enough cages for all of your kits once they have been weaned off of their mom.

Minimum Space Requirements Based on an Adult Rabbit Weight			
Max Sr Weight in Pounds	Breeds	Required Cage Space	Required Cage Height
Rabbits less than 4.4 pounds	American Fuzzy Lop, Britannia Petite, Dwarf Hotot, Himalayan, Holland Lop, Jersey Woolly, Mini Rex, Netherland Dwarf, Polish	1.5 ft x 1.5 ft	14 inches
Rabbits 4.4-8.8 pounds	Standard Chinchilla, Dutch, English Spot, Florida White, Havana, Lilac, Mini Lop, Mini Satin, Silver, Tan, Thrianta	3.0 ft x 3.0 ft	14 inches
Rabbits 8.8-11.9 pounds	American, French Angora, Satin Angora, Argent Brun, Belgian Hare, Beveren, Blanc De Hotot, Champagne D'Argent, American Chinchilla, Cinnamon, Crème D'Argent, Harlequin, New Zealand, Palomino, Rex, Rhinelander, Satin, Silver Fox, Silver Marten	4.0 ft x 4.0 ft	14 inches
Rabbits over 11.9 pounds	Giant Angora, Giant Chinchilla, Checkered Giant, Flemish Giant, English Lop, French Lop	5.0 ft x 5.0 ft	14 inches



Materials & Protection

Your rabbit's size will also determine what type of material your cages need to be made out of. Giant rabbits need to have a solid floor so they do not get "sore hocks" which is an infection of the rabbit's footpads. Due to their large bodies' constantly placing pressure on their small feet, if they are on a wire floor their feet will continuously have "sore hocks". Your smaller breeds, on the other hand, can be on a wire floor that measures ½ x 1 inches. The half-inch side is the one that needs to be against the rabbit's feet as it will cause less irritation. The advantage to a wire flooring is that they are self-cleaning, provide better sanitation, and are typically easier to maintain. Whether your rabbit will be indoors or outdoors will also determine which materials are needed for their cage. Outdoor cages are usually a combination of plywood or pressed board, galvanized welded wire, and a roof to provide protection. While indoor cages are typically made out of the galvanized welded wire. One thing to keep in mind is that a rabbit's teeth will grow the duration of their life, which causes them to gnaw. Any portion of the cage that is made out of wood a rabbit will gnaw on. Therefore, you will be making more repair to your cage over the course of time.

Proper Care and Health

In terms of vaccinations and health, rabbits are usually a low-maintenance animal. There are no recommended vaccinations and very few medications that can be used on rabbits. In general, most veterinarians have limited experience treating rabbits, therefore, it is important for you to become familiar with your rabbits normal behavior and to know the signs of common diseases (Dick, Mangione, Phares, & West, 2016). The book, *Raising Better Rabbits & Cavies* (American Rabbit Breeders Association, Inc., 2020), has an entire section dedicated to the medical management of rabbits. In addition to this book, ARBA also has a Rabbit and Cavy Health committee that can help you with your rabbit medical questions.

Due to rabbits having a light skeletal structure, it is important that they be handled properly. Otherwise, they can be easily hurt. Rabbits should start being handled once they have been weaned, this way they can start getting used to humans. Depending on the breed of rabbit, with your dominant hand you either pick them up by one ear, both ears, or no ears, along with the nape of their neck. With your other hand, you will support the rabbit's rump and then lift them towards you. You always want to lift your rabbit, never pull them because if you do you could get their toenails caught on the wire of their cage. Once your rabbit is safely out of their cage hold them close to your body or tuck them under your arm so their eyes are covered. Rabbits are scared easily so holding them close and covering their eyes help them feel safe and protected.

Sources

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