

Breeding Rabbits

Before you breed or consider breeding, you should ask yourself a few questions. Why are you breeding? Do you want to breed show quality animals? If so, make sure that you start with good stock for your breed. Are you going to produce commercial fryers for market? If so, check with your processor to see their requirements before you purchase your breeding stock. Do you just want to have a litter for fun or because you think that they would be cute? That is all well and good, but what are you going to do with the kits? All rabbits must be in their own cage by 12 weeks old at the very latest. Before you breed, ask yourself “do I have a separate cage for each rabbit if it does not sell? Am I prepared to care for and feed every rabbit that I bring into this world for the rest of their lives if they do not sell? If you do not have a guaranteed way of getting rid of excess kits (an auction, home processing, a cull-buyer at a show), do not breed. Also do not breed if you intend to market the kits as show quality or purebred, but your rabbits are not good examples of their breed (just because a rabbit has a pedigree does not mean that it is a quality animal). You will make a bad name for yourself by selling poor quality animals to people and saying that they are “show quality.” It cost just as much (if not less) to feed and care for a purebred rabbit that has good type for its breed as it does to feed and care for a mixed or poor quality rabbit. Even if you just want to breed for pets or meat, start with pedigreed animals from a good breeder. This way, if you decide that you would like to show, sell show animals, or sell purebred breeding stock, you can do so. And even if you do not, people appreciate buying a quality animal.

Choosing Your Pair

Choosing your breeding stock is the most important part of raising rabbits. The point is not to just make more rabbits, but to either produce offspring of a better quality and confirmation than their parents, thus improving their breed, or to produce fast growing, firm-fleshed animals that you would be proud to market.

Your breeding stock should be healthy, of good quality and confirmation based on their breed standard, come from lines known for good mothering skills and growth rates, and be in peak condition. Another, less important consideration is color and variety. You want to produce colors that are showable, but confirmation is more important. Build your house, then paint it. Your pair should not have the same faults. Two rabbits with low shoulders will produce offspring with low shoulders. A doe with excellent shoulders and a not-so-great head should be bred to a buck with not-so-great shoulders and an excellent head or, even better, a buck with great everything. Buy the absolute best buck that you can afford, as he is half of your herd.

If you do not know if your rabbits are good examples of the breed and should be bred, consult an experienced breeder of your breed or get a copy of the Standard of Perfection (SOP) put out by the ARBA. The SOP can be hard to interpret without first having the terms and ideas demonstrated on a real animal, so, ideally, find an experienced breeder to be your mentor.

Breeding Your Does

The general rule is to breed does around six months, but a much better indicator of when your doe is ready to be bred for the first time is when she reaches senior weight. For example, senior weight for a mini lop is 4.5 to 6.5 pounds, so when your doe is about 4.5 pounds, you may consider breeding her. A doe that is ready to be bred will have a dark red, swollen vulva. Rabbits are induction ovulators, meaning that they do not have a heat cycle, but rather ovulate (release eggs) after being serviced by the buck. Despite this, does are not always ready to be bred. A doe will cycle through days of being willing to be bred and days of being unwilling to be bred. A doe with a pale vulva is not in the part of her cycle where she wants to be bred, but when her vulva is red and swollen, she is ready to be bred. A buck is ready to be bred at about seven or eight months. Before this, he may be willing to breed a doe, but nothing is likely to come of it, as he is probably not producing viable sperm yet.

Only breed animals that are in peak condition. They should be of firm flesh, neither fat nor underweight, be free of molt, and have no other health problems. Check the eyes for brightness and clarity, the nostrils and inside front legs for discharge, the vent area for redness or scabs, and feel the body for blemishes. Be sure not to let breeding animals get overweight. Overweight bucks will have less stamina and be unwilling to service a doe. An overweight doe will collect fat around her internal organs, especially her ovaries, preventing her from getting pregnant.

Bring the doe to the buck's cage. Does are very territorial and will defend their cages. The buck will mount the doe and, if the breeding has been successful, he will seize up, snort (This is the best that I can describe it. It is kind of like a snort/wheeze kind of noise.), and then roll off of the doe either backwards or to the side. Just because the buck mounted the doe does not mean that she is bred! The buck must fall off. Let the buck service the does as many times as he is willing; this will be about three times. He will rest a minute or two between services. You can then return the doe to her cage. Never leave the doe in with the buck unsupervised. If you wish, about eight hours after the first breeding, as this is when she will most likely ovulate, you may return the doe to the buck's cage and let him service her a few more times.

If the doe is unwilling to lift (rise her back end up to allow the buck to breed her), you can try to table breed the pair. Rather than place the doe in the buck's cage, put them both on a table. Be sure to supervise so that they do not fall off of the table. This way, if necessary, you can hold the doe for the buck and she will be unable to back into the corner of the cage.

Pregnancy

The gestation period for a rabbit is 28-35 days. It is very important that you write down when you breed your does. The day after the doe is bred is day one of her pregnancy. Does do not require any special care during pregnancy. Do not increase her feed until after she kindles unless she is finishing all of her feed long before the next feeding and acts starved when fed. As with all rabbits, it is very important that your doe have constant access to fresh, clean water. On day 27 of her pregnancy, give the doe a nest box. A nest box can be wooden, metal, or wire with a cardboard liner. The box should only be slightly bigger than the doe. She should be able to get in

to nurse the kits, but it should not be large enough that she is tempted to sit in it, as she will crush the kits. Do not give the doe the box early or she may use it as a toilet and soil the box. It is very important that the doe has a box to kindle in, so write down the day she is bred, count 27 days and then write the day to put the box in. Stuff the box with hay and give the doe hay in her cage to add to the nest if she desires. In the winter, it helps to add pine shavings to the bottom of the box to absorb moisture.

Kindling

Your doe may kindle anywhere from 28 to 35 days after she is bred, but many does kindle around day 31. Does generally kindle during the night, so you will most likely wake up to babies. Do not pester a doe that is bred. Go out to check on her as many times as you would normally. Do not bother her, as you will stress her and she will not kindle while you are there. If you catch your doe kindling, leave and come back in about an hour.

It is extremely important to check the babies. After the doe has kindled, either pull the box to the front of the cage or take it out and set it on a table. The doe should have pulled fur to cover the babies, gently set this aside and pick up each kit one at a time. Check each one over to ensure that the doe completely cleaned it, that it is not deformed in any manner, and keep count. Kits are much stronger than you think and move a lot more than you think, so be very careful to hold them firmly and to not hold them in your open hand. Rather, keep them enclosed so that they cannot jump out of your hand. Make sure that the babies are all together again in the nest in the same place when you are done and cover them as they were.

It is a myth that a doe will kill or eat her babies if you touch them. Your doe should be used to your presence and smell, as you should be handling your rabbits at least weekly, if not daily. If you are worried that the doe will harm the babies, when you put the box back in, touch the doe's nose so that all she can smell is your scent and she will not notice that the babies smell any differently. The doe may check on the babies when you put the box back in, but she should not harm them.

Caring For Kits

Check the babies every day. Make sure that none have gotten separated from the group or died and are rotting in the nest. Also make sure that they have been fed. A fed baby will have a round, taunt stomach. A wrinkly baby with dull fur has most likely not been fed. The kits will open their eyes around 10 days. It is recommended that you clean the box out at about this time so that they open their eyes in a clean nest to prevent getting a condition called "nest box eye." Once the kits' eyes are open, they will start to jump out of the nest box. Once the kits begin to jump out of the box, they may have trouble getting back in. Either tip the box over onto its side or provide a step up into the box, such as a brick. At about three week in the summer or four weeks in the winter, the nest box can be removed. By this point, the kits will not really be using it. Keep the cage very clean to prevent disease from spreading.

Kits will start to eat their mother's food when they are ready. They start to eat solid food in

the nest by nibbling on the hay that makes the nest. You can also sprinkle oats in the nest box at about ten days and they will eat it if they are ready. Once they begin to eat solid food, keep the feeder filled and let them eat as much as they want. Also, feed them hay daily to prevent weaning enteritis, a condition caused by kits having problems switching from nursing to eating solid food. If you see a kit with diarrhea, immediately take away pellets and feed only hay and oatmeal (the Quaker oats kind in the cardboard tube—old fashioned not instant—or steam-rolled livestock oats) for three days.

Kits can be weaned from six to eight weeks. Large litters should be weaned slowly to prevent the doe from getting mastitis. Take the largest kits first and take one kit away at a time over about a week. Rabbits should not be sold until they are a minimum of eight weeks, as they are very susceptible to stress until this point. At the absolute most, the kits can stay together until twelve weeks, although I discourage this, as it slows growth and some develop before twelve weeks. After twelve weeks the bucks will begin to fight and your does may become old enough to become pregnant.

Rebreeding

When you rebreed your doe will have to do with your breeding purposes. Does can be bred back as soon as they kindle, but will have a much shorter breeding career. Another problem more likely to occur is a doe going too long between litters and having a hard time conceiving or kindling. Those breeding for show will most likely take a moderate breeding schedule. A doe can be bred again as soon as she kindles, but those breeding for show will see no benefit to this. Ideally, kits will stay with their mother between six and eight weeks. If the doe is bred as soon as she kindles, the kits will have to be removed at around three weeks, which will result in a lot of loss. Personally, if I wish to get a litter out of a doe back to back, depending on her condition, I will breed her when the litter is six weeks. This way, I will remove the kits at eight weeks and the doe will have two weeks “off” before the next litter comes. Carrying the litter is not stressful to or taxing on the doe, raising the litter is. In commercial production, doe are bred on a much more rigorous schedule. Does are expendable, so the shortened breeding life is not of great concern. The doe can be rebred when the kits are two weeks old, again depending on condition. The kits are removed when the nest box is added, when they are about six weeks, and put into a grow-out pen to be grown out to slaughter.

No matter what breeding schedule you choose for your does, the most important aspect is being able to tell when your does are in the condition to be bred. A doe that can be re-bred will have firm flesh, a full, shiny coat, and not be too skinny. If your doe looks ragged or worse for wear, it would be best to give her a break between litters until she is in good condition.

More of a danger than wearing your doe out is not breeding her enough. A doe that is not bred for too long will most likely get fat and have trouble kindling. Even if your doe does not look overweight, she is most likely collecting fat around her internal organs if she is not “working.” The fat will either prevent her from being able to conceive or she will have difficulties kindling, such as having a kit become stuck in the birth canal. This can also happen if a doe is too old

when bred the first time.

Trouble Shooting

My doe won't lift for the buck.

Your doe is probably either not ready to be bred or is not in cycle. Wait until her vulva is dark red. If she still will not breed, add some apple cider vinegar to her water at the rate of about 1 to 2 tablespoons per gallon (This is something that can be done daily, as it also reduces the ammonia odor of their urine. They also like the taste and will drink more water, which is always good.) and/or feed her a few black oil sunflower seeds (BOSS) for a few days. She may also not want to be bred because she is malnourished, feels that she is in an unsafe environment, or is generally stressed.

My buck won't breed my does.

Your buck is probably overweight. Bucks should have good sized cages so that they get exercise and stay in shape. You can also try the apple cider vinegar and BOSS with the buck.

My doe is pregnant and stopped eating.

If a doe stops eating after you have put in the box (after day 28) this means that she is getting ready to kindle. If your doe stops eating earlier in her pregnancy, you have to get her eating again or she will develop GI stasis. To do this, mix some corn syrup into her water, she will like the sweetness and drink more, which should entice her to eat. Also, offer her some treats.

My doe is making a nest outside of the nest box.

If the doe starts to make a nest outside of the box, carefully pick up what she has made and place it into the box. If she continues to build outside of the box, put another box or two into her cage so that she has no room to build a nest anywhere but in a box. Once she has chosen a box to build in, you can take the others out.

My doe has not built a nest.

Many does will not build a nest until right before they kindle. Some will build one after she kindles. Others will build wonderful nests weeks before they are due. Some will even build a nest, eat the hay it is made of and then build another one. First time does are the ones that you should worry about, but even they will probably make a nest if they are from good mothering lines.

My doe had her kits in the box, but did not pull fur.

Fur is the most important part of the nest, as this keeps the kits warm. Your doe will not sit with kits to keep them warm like a dog or cat. If the doe does not pull fur, flip her over and pull fur out from her abdomen. The fur should come out easily. Pulling fur exposes her teats and makes it easier for kits to nurse, as well as stimulates her milk production. If you have a doe pull more fur

than necessary, such as during the summer, save the fur for a case where a doe does not pull any fur or does not pull enough. Does will not mind having another doe's fur in her nest.

My doe had kits outside of the box and they're cold.

First, don't panic. Grab the kits and put them against your skin and bring them in the house. Place them in a plastic bag and slowly and carefully warm them under running water, being careful not to get water in the bag. Have someone warm a towel in the dryer. Once the kits are warm, place them in the warmed towel. Once they are fully warmed, the ones that are still alive will begin to move. If the doe built a nest, place the kits into the nest. If she has not, make a hollow in the hay and pull fur from the doe to make a nest. If the kits are fully warmed and still not moving, they have probably expired. If this is a first time doe, do not be too upset. It often takes a doe a few times to fully come into her mothering skills. Most people give a doe "three strikes" to successfully raise a litter. If only some of the litter is chilled, do not put the chilled kits in with the warm ones before they have been warmed or they will make the whole litter cold.

My doe is not caring for her babies.

Most likely, your doe is caring for her kits. Unlike other animals, a doe does not stay with her kits. Your doe will only go into the nest once, maybe twice a day to nurse and then leave them alone. Your doe should not be in the nest! She will crush the kits. She should jump in to nurse and then leave. A kit is not being fed if it is wrinkled and does not have a round stomach. A fed kit will have a shiny coat. A doe's milk may not come in for 24 hours after kindling and a kit can go 48 hours without being fed, so don't panic. If you are worried about your kits, you can have someone flip the doe and let the kit nurse but keep a hand over the kit so that it does not fall off of the doe. Sometimes a doe will simply not lactate (produce milk). If this happens, you can try to hand raise the kits. Unfortunately, rabbits are very hard to hand raise, so chances are that you will lose them. Thus, hand raising should be an absolute last step. If it comes to hand raising kits, call me. Rather, it is better to try to foster the kits to another doe that has similarly aged kits. This is why it is always best to breed two does at a time or breed at the same time as a friend. Most does will readily foster another doe's kits. To do this, take out the box of the doe who will be fostering the kits. Place the kits to be fostered in the box and let them mix around with the other kits. After about 15 minutes, the kits will all smell the same, as they are all surrounded in the doe's fur. The box can be put back in with the doe. The doe may go into the box to see what has happened, but it is unlikely that she will be upset about the new kits: rabbits can't count.

Some of the kits are fed, but others aren't.

This is a common problem with large litters or where there is a large size difference in some of the kits. Again, this is why it is important to breed more than one doe. Take all of the large kits that are hogging the milk and put them with one doe and take the smaller, meeker kits and put them together. The small kits will not have to fight large kits to nurse and should even out in size. This should be done with meat pens regardless of if the small kits can nurse. The six largest

kits should be given to the doe that produces the most milk and all others given to the other doe. This will ensure the fastest growing kits are fed best and have the best chance of reaching their full potential. If you only have one doe, you can still try to save the smaller ones. If there is only one or two unfed kits, flip the doe and allow them extra nursing time. If there are a few un-nursed kits, take out the most fed ones and place them in another nest box. Leave them out for a feeding or two and then the others will be strong enough to get their share of the milk.

My doe is attacking or killing the kits.

First, make sure that she is really hurting them or if she is just jumping into the box after you check them. Some does like to check on the kits after you've had them. If she is really hurting them, remove the nest box. The kits should be kept out of the doe's cage and only brought to her twice a day (morning and evening) for her to nurse them. She should be in such discomfort from the pressure from her milk, that she jumps right into the box and nurses them to release the pressure. If the doe is so aggressive that she attacks the kits before she nurses, you will have to flip her and let the kits nurse while she is restrained. Aggression and bad mothering are genetic, so do not keep any kits from the litter. The does will likely be bad mothers themselves and the bucks will produce daughters that are poor mothers.

It's cold out and I am worried about the kits freezing.

Rabbits are very hardy creatures that tolerate cold much better than heat. Generally, if it is above freezing, don't even worry about the babies. If there are fewer than four and it is below freezing, bring the nest box in and bring it out for the doe to nurse twice daily. If there are more than four, I would not worry about them being cold until about the single digits, then bring them in. If the doe has built a good nest and your rabbits are kept out of the wind and rain, there is no reason to worry until it is below freezing. When you do have to worry is when the kits begin to jump out of the nest. If it is below freezing around the time the kits are about to jump out of the nest, line the cage with hay and check regularly for kits out of the nest, as they will likely not be able to get back in easily. Make sure that they have a step back into the nest.

It is day 31 and my doe has not kindled.

Whatever you do, do not remove the box! A rabbit's gestation period is 28-35 days, so she still has plenty of time. Just to be safe, it is best not to remove the box until day 37 after breeding. The worst thing is to assume a doe isn't bred and then lose the whole litter because you took the box out and she had then on the wire.

Something went wrong and all of the kits died.

There is a very steep learning curve to raising rabbits, so loss is common. The best thing that you can do is assess the situation and figure out what went wrong so that the mistake is not repeated. Unless the doe lost the litter because of a health problem, she can be immediately rebred.