

THE ART OF PALPATION

BY: CHARLCIE FOWLER

PHOTOS BY: MEADOW GUSTFSON AND BETHANY ROBERTSON

OF

WILD MEADOWS RABBITRY



An expectant mother prepares her nest just days before the big event.

Several years ago, I wrote an article for *Countryside Magazine* on the subject of palpation of does to determine pregnancy. It has since been reprinted a few times and has lived on the World Wide Web in one form or another for more than 15 years. Palpation is a subject that fortunately needn't grow old or passé as I highly doubt this good old "touchy feely" method of determining pregnancy in does to answer the burning question, "Is She is or is She ain't with Babies?" (forgive my little twist on Louis Jordan's 1940s hit), will ever be replaced by sonogram technology—even in the largest rabbitries.

I have, over the years, been quite amazed at how many rabbit breeders do not know how, or are not comfortable in, the art of palpation as a means of determining pregnancy. So, following is the gist of my original article with an update or an edit here or there...



Figure 1: While grasping the doe with one hand, slide the thumb and forefinger of the other, back and forth while pushing upward into the abdomen, just in front of the pelvis.

Rabbits breed, well...like rabbits, right? Usually this is how it goes.

In most cases, the doe is placed in the buck's cage; the buck falls over backward or onto his side after a quick mount and a new litter of bunnies can be expected in 31 days.

In more than 40 years of raising rabbits, I am still amazed at how many breeders (many "old-timers"), rely completely on the above scenario and then are disappointed when, after a month of anticipation, no bunnies appear. It is my opinion that if one is serious about raising rabbits, one should learn the art of palpation - feeling for the developing embryos within the abdominal cavity of the pregnant doe.

Many folks make the excuse that palpation is too difficult to learn. Many rely on the "Test Breeding" method. Using the "Test Breeding" method, one waits about two weeks following the initial service, then returns the doe to the buck's cage for a second "test" mating. In theory, if she is "with litter", the doe will whine, growl, flatten herself against the cage floor and otherwise register her distaste to the buck's advances. Often this is the case, but unfortunately there are does who will breed if pregnant and those who refuse the buck when they are in fact, open. I've seen both examples many times.

So why is this a problem? Here are some key issues:

- Does that are assumed to be bred are often fed extra feed that final 10 days before the due date, which is a waste of feed if she is not carrying a litter.
- Does that accept the buck even while pregnant, can fool the keeper into believing the doe is not pregnant and she

ends up kindling on the wire when a nest box is not provided.

- In a worst-case scenario, a doe can actually become pregnant with two litters. (Does not only have two uterine horns, but two cervixes as well.) If a doe was pregnant in only one horn, then conceives in the second two weeks later, when she kindles the older litter, the younger litter may die and become mummified creating a permanent sterile condition in the doe. Or the doe could become ill and die.

- Finally, it is just a plain bummer to anticipate a litter when none is forthcoming.

Given the four scenarios listed here, it's always best to just make sure.

Learning to palpate just takes a little practice. Older does are easier to practice on than first-litter does as their muscles are a bit more relaxed. I like to take the doe out of her cage and place her on a carpeted table, but you can palpate by leaving her in the cage if you prefer. With one hand, grasp the doe over the ears and shoulders and take the other hand with the thumb and fingers opposing each other (See Figure 1), and push up into the abdomen just in front of the pelvis. Be firm. Don't be shy.

People who fail at palpation usually do so out of fear of hurting the doe or the developing embryos. The chances of that happening are very slim. Each embryo is cushioned in its own amniotic sac, so what you are actually feeling is the fluid filled amnion, not the embryo itself. You can safely exert enough pressure to raise the doe's hindquarters nearly off the table without harming the doe or her embryos.

Now, move your hand back and forth along each side of the abdomen and slightly toward the middle. At 10 days' gestation the embryos feel like ripe blueberries, at 12 days those "blueberries" feel about the size of marbles, and at two weeks' gestation, the embryos feel like large, firm grapes or olives. Once I encounter embryos, I stop, congratulate the doe, and return her to her cage. The entire procedure takes only seconds to perform.

I have had people tell me that they can palpate a large, commercial type rabbit such as an American or a Satin and tell if she is pregnant, but that they can't tell on a Jersey Wooly. "Pish posh!" I say. Believe it or not, whether it be Satin or Jersey Wooly, the embryos in the first 2 weeks of pregnancy are about the same size whether we are talking about a commercial or a fluffy, compact breed.

Some folks may confuse the round fecal pellets for embryos. Confusion can be avoided by remembering that the fecal pellets are small, very hard, and are found closer to the backbone while embryos are found about midway into the abdominal cavity. If you squeeze fecal pellets, they will feel almost like pebbles. They will not have the "firm fruit" feeling that embryos possess. Also, don't wait to palpate thinking the larger embryos will be easier to detect. After 14 days, the embryos become larger and softer and are harder to distinguish from the other contents of the abdomen. It is not until much closer to kindling that you are once again able to detect the unborn

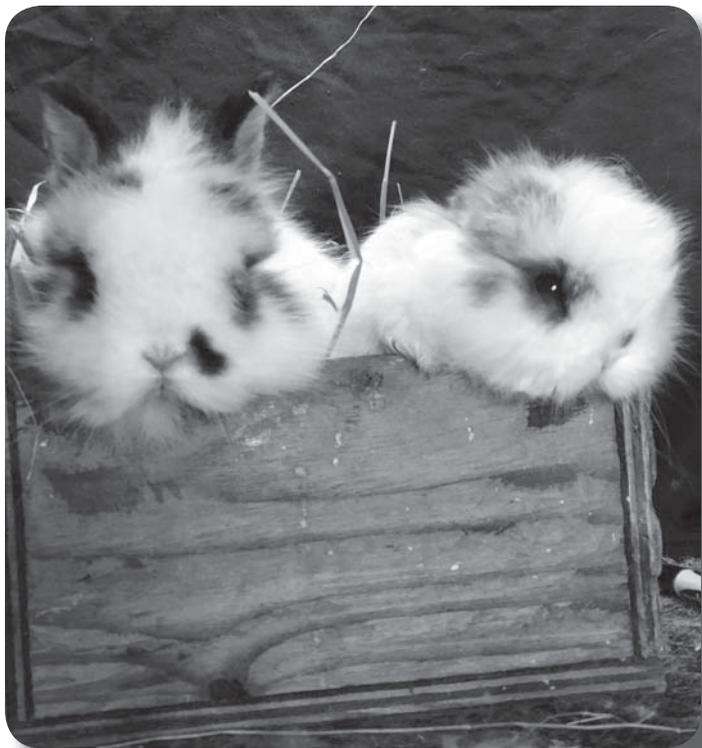
feti. I also recommend that when you practice, you palpate does you know are NOT pregnant as well as does whom you suspect are. The comparison will make things fall into place that much easier.

A good rule to follow is to palpate bred does at 10 or 11 days post breeding. There is a distinct purpose for this practice. Seasoned rabbit breeders will tell you (and it is true), that a pregnant doe often has that certain "bloom" about her. (Similar to that certain "glow" so evident in a pregnant woman.) It's been my practice on an age-appropriate doe, to breed her about two weeks before a show. If you follow

It is just a plain bummer to anticipate a litter when none is forthcoming.



A healthy litter of Jersey Woolies, always a welcome sight in the rabbitry, nestle into a soft cloud of mother's wool.

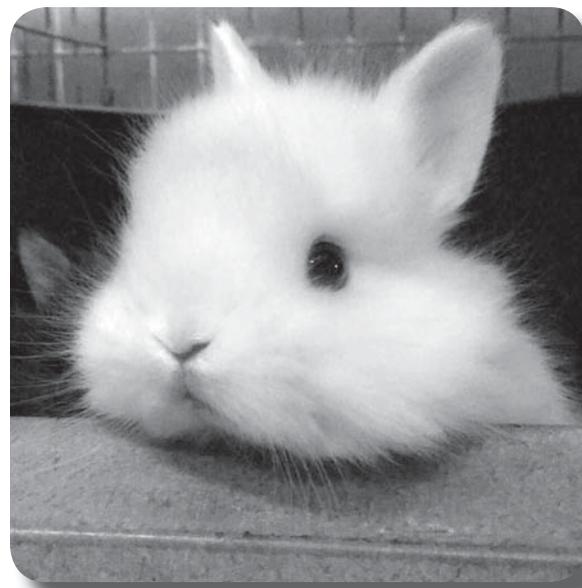


Curious litter mates get ready to explore the world outside their cozy nest box.

By learning the art of palpation, you can also confidently verify the 'as bred' status of a doe that someone wants to sell to you and make sure that she is indeed 'in the family way' or if she is open. (Believe me, this knowledge will come in handy on more than one occasion!)

It is also a good habit to palpate at 28 days (when the nest box goes in). At this stage, you can feel the actual heads and bodies of the kits. Your final palpation of the doe during the kindling cycle should be after kindling. At this point, palpation makes it possible to detect any retained fetuses within the uterus. Does who have not successfully delivered their entire litter, should be culled as they usually become permanently sterile.

Not only can knowing the art of palpation help you determine when to set out those nest boxes, it is also a useful skill in helping to diagnose possible tumors, cysts, etc., in your herd. In other words, palpation is a skill that all serious rabbit breeders should master. So, don't be shy. Give it a try!



Don't be shy!

this practice, you could present a doe on show day with an edge no supplement could provide and she will not be so far into her pregnancy that showing her will cause undue stress. Plus, she would not be "heavy with young" which is a no-no on the show table.

Furthermore, if you truly master the practice of palpation you can take the guesswork out of selling a bred doe and confidently tell your buyer if she is really bred. There is no more "hopefully" or "probably." By determining pregnancy early, you will give her plenty of time to adjust to new surroundings. If you determine she is not bred, you can rebreed her that much sooner.

.....

**Charlcie Fowler is a retired rabbit breeder who spent 44 years on the show circuit. She served as the former Program Coordinator/Instructional Specialist for the University of Arizona Extension Service in Yavapai County, 4-H Instructor for Clatsop County/OSU Cooperative Extension Astoria, Oregon, and former 4-H Youth Assistant for the University of California Cooperative Extension in San Bernardino County. Charlcie spent 25 years working with youth and adults, conducting workshops and working with large livestock and small animal programs in California, Arizona, Utah, Oregon, and Texas.*