

ARE YOU PREPARED TO BE A RESPONSIBLE BREEDER?

1. Do you have firm commitments for buyers of several puppies *before* considering breeding?
2. Are you prepared to screen prospective buyers and be selective to make sure your pups are placed in great homes where they will be well cared for?
3. Are you willing to keep your pups until they are well placed, no matter how long that takes? Will you be prepared to take a dog of your breeding back if the owners cannot keep it?
4. Do you know enough about genetics and heritability of characteristics in your dog's breed to select a sire (father) that will balance your dog's weak characteristics?
5. Have you looked into the family tree of the dogs that you are breeding, enough to feel comfortable giving your buyers a solid assurance and *written guarantee* of health, temperament and soundness? Are you financially prepared to honor this guarantee?
6. Are you prepared not only to do routine pre-breeding testing and to provide veterinary care for the mother and the litter, but also to cover emergency complications such as a C-section or sick puppies?
7. Are you prepared for the possibility of losing pups to birthing or immediate postpartum problems?
8. Do you have the time it takes to properly socialize the puppies for the first 7 weeks of life?
9. Do you have the time, patience and enthusiasm to help your buyers learn the best ways to raise the pups you sell them and to act as a lifelong resource for them and an ambassador for the breed?

IF YOU DID NOT ANSWER YES TO EACH OF THESE QUESTIONS, YOU SHOULD NOT BREED AT THIS TIME.

SO YOU'VE DECIDED TO BREED YOUR DOG...

The average dog has a cycle every 6-8 months, but that varies, depending on the individual and the breed.

The female dogs has 4 stages to their cycle:

1. *Proestrus*
 - a. This stage lasts an average of 9 days (but can range from 4-25 days)
 - b. During this stage you see a **bloody vaginal discharge** with swelling of the vulva – **the first day you see this discharge is DAY 1 of the cycle.**
 - c. The male dog may be interested in the female dog, but the female will *usually* not be interested.
2. *Estrus (true heat)*
 - a. This stage lasts an average of 3-10 days (but can range from 2-15 days)
 - b. During this stage the discharge may change from red to straw colored, or may disappear.
 - c. The **female will usually allow breeding.** She will flag her tail to the male and may seek him out. You may see that she has a decreased appetite.
3. *Diestrus or Metestrus*
 - a. This stage lasts approximately 70-80 days.
 - b. The female will refuse to mate. Sometimes the female will still stand for the male for the first week of this stage.
4. *Anestrus*
 - a. This stage lasts for the rest of the cycle. It is a stage of sexual dormancy.

DECIDING WHEN TO BREED... 4 METHODS

Breeding on specific days: This is difficult due to cycle variation in individual dogs. Dogs usually ovulate about 24-48 hours before the end of estrus, therefore picking an individual day to breed is fraught with error.

Breeding according to behavior: Most females will stand to be bred but some will stand for the male through proestrus, estrus & diestrus. If breeding according to behavior, start during proestrus by allowing the male and female to spend a **short period of supervised, controlled time** together each day. If the female will stand for the male, encourage breeding. Then repeat every 2 days until the female no longer stands.

Breeding according to vaginal cells: The vaginal cells change as the hormone levels change during the 4 stages. Have your veterinarian check the vaginal cells 5 days after the bloody discharge is first noticed, or if you notice that there is no more bleeding coming from the vulva. Your veterinarian will be able to advise you if further testing is necessary, or when your dog may be able to be bred. Usually several serial vaginal smears are required.

Breeding according to hormone levels: This is the most exact method for determining when the best time to breed is, and is usually done in combination with looking at the vaginal cells. It involves having a blood test done at the vet clinic. Based on the results, your veterinarian will be able to advise you if further testing is necessary, or when your dog may be able to breed. Again, several serial hormone checks are usually needed.

IDEALLY, YOUR DOG SHOULD BE FULLY VACCINATED AT LEAST 2 WEEKS PRIOR TO BREEDING.

CHOOSING THE RIGHT ENVIRONMENT FOR BREEDING DOGS...

Send the female to the male's environment (not the male to the female). You want the male to be dominant, as some degree of male dominance may be necessary for breeding to occur.

Commonplace problems:

1. *Dominance/submission* – the male is fearful of the female. Good restraint of the female may help to resolve this problem.
2. *Familiarity* - if the male and female have been together and interacted for a long time in the same household, you may need to take the female away from the male for about a week before estrus starts, and then reintroduce him to her.
3. Male dogs that have been reprimanded harshly in the past during attempts to breed may develop a *fear of breeding in the presence of humans*. Owners of the male dog should not be present during the mating process if the dog has been punished in their presence for mating behavior.
4. *Inexperience* – of the male, female or both.

Artificial insemination (AI) is an option for dogs that are not compatible to be bred for whatever reason. Talk to your veterinarian for more information about this procedure.

The act of mating...

The male will be attracted to the female and will sniff her. She may sniff him as well. Licking, chasing and wrestling may occur. Once the female is ready, she will allow the male to mount her. The male will clasp the flanks of the female and with a series of pelvic thrusts the penis is directed toward the vaginal opening. It is normal for there to be multiple attempts before he finds his mark. Following ejaculation, the male will normally dismount from the female and end up standing tail to tail with her. The dog's penis is trapped within the female at this time. This is known as the "tie". This may last for 5-10 minutes. The best way to separate them is with *time!*

PREGNANCY DETECTION...

21 days after mating, your veterinarian *may* be able to ***feel*** the small puppies within the womb of your dog, but this test can be inconclusive.

At 45 days after mating, the puppies will begin to be visible on ***x-ray***. We recommend performing an x-ray at 55 days after mating, in order to accurately count the number of puppies.

The puppies can also be seen on an ***ultrasound*** at 30 days or later after mating. Ultrasound is a poor way to count the number of puppies.

Pregnancy lasts an average of 62 days (9 weeks) for dogs, but there is individual variation.

This number is counted from the last day that the dog is bred.

During your dog's pregnancy, ensure that she is fed a **high quality diet**. We recommend feeding a high quality puppy formula once the pregnancy is confirmed. The appropriate amount to feed can usually be found on the packaging. If you have questions, please contact your veterinarian. Additionally, we suggest a **high-quality multi-vitamin**. **Routine daily exercise** in moderation is also recommended, as she will need good muscle tone for whelping. After the puppies have been born, we recommend giving the mother a calcium supplement.