



SHILOH VETERINARY HOSPITAL

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Breeding Guidelines

When planning a breeding, it is important to get everything in order **prior** to the bitch coming into heat. Depending on what method of breeding is used, if the female is too far along in her estrous cycle it may not be possible to pinpoint the fertile period.

PLANNING AHEAD IS CRUCIAL TO SUCCESS.

There are several methods to achieve a successful breeding. It is always highly desirable to begin with either a male that has previously sired a litter or a female who has previously whelped a litter. If neither has ever been proven fertile, then you are entering two unknown variables into the equation.

METHODS OF BREEDING:

1. Natural breeding and/or artificial insemination with both dogs present: Occasionally it is difficult to get two dogs together to tie successfully. Often it is simply a matter of timing.
2. Fresh chilled semen: Fresh chilled semen is often used when one of the dogs is located out-of-state or too far away to travel. We can collect a male and ship the semen, or we can inseminate the bitch with fresh chilled semen sent to our hospital. Fresh chilled semen usually lives only 48-72 hours after it has been collected from the male. Tests to determine more specifically when the optimal fertile period is are required.
3. Frozen semen: Frozen semen is usually reserved for cases when the male is too old to have viable sperm or is deceased. This semen has been previously preserved in cold storage. Surgical insemination is usually favored as the semen lives only 12-24 hours after it has been thawed so **exact** timing of the fertile period of the female is required.

BREEDING PARAMETERS AND TESTS:

1. Vaginal cytology: This is helpful to confirm the current stage of the estrous cycle and to determine when progesterone and/or LH testing should begin. This will also determine if the bitch is early in her heat cycle, fertile, or out of heat entirely. When doing a natural breeding this may be all that is necessary to follow for a successful outcome.
2. Progesterone testing: Progesterone levels are very beneficial to track. A rising level proves that the cycle is progressing normally and can help to pinpoint when to breed for the best chance at fertilization and implantation of the eggs. The downside of this test is that the rise of progesterone can be very variable among dogs and often patience is needed to wait until the optimal progesterone level is reached. More frequent testing can add to more cost. A progesterone level is

measured in a blood sample obtained and sent to an outside lab. Results are back within 24 hours.

3. **LH testing:** When the LH (luteinizing hormone) level peaks, we can then calculate the time ovulation occurs and pinpoint the very best day(s) to breed. When using frozen semen this is imperative to do due to the short life of thawed semen. The cons of this test are that it must be done daily and within 24 hours of the last test. The LH surge can peak and fall quickly and can be missed entirely if the testing interval extends beyond a 24 hour period. LH testing also requires a small blood sample, but this is an in-hospital test.

PREDICTING THE FERTILE PERIOD

Once a bitch has started her heat cycle we need to see her around day 5-7 after bleeding has been noted. Once there is 60% cornification of the cells on a vaginal smear, progesterone and potentially LH testing is started (depending on the method of breeding desired). Fresh chilled semen requires progesterone testing and frozen semen requires both progesterone and LH testing.

BEST ADVICE:

1. **PLAN AHEAD**, especially if considering breeding with dogs that are out-of-state and/or out of driving distance.
 - a. Most fresh chilled semen requires FedEx shipment and FedEx does not always deliver over the weekend.
 - b. Make sure your stud dog has had a recent semen analysis or has recently sired a litter.
2. We need to see the bitch no later than 5 days after she starts bleeding. Every situation is different and every bitch is different. **Wrong timing is by far the most common reason conception does not occur.** If we start monitoring too late then you have lost another 6 months.
3. At least one of the pair should be a proven producer. Using two unknowns only introduces more variables that cannot be controlled and thus more chances of not obtaining a successful breeding.
4. Breeding can be expensive. Cutting corners also increases your chances of failure.

COSTS:

1. Vaginal cytology is charged per slide. This is done to establish that the bitch has begun her estrous cycle, where she is in this cycle, and when to start blood testing (unless a natural breeding).
2. Progesterone testing is charged per test. Once the vaginal cytology indicates that we're getting close to true estrous, this test is done at least every other day until breeding. This can be anywhere from 2 tests to 8 or more.
3. LH testing is charged per box of tests. This includes 6 tests.
4. Artificial insemination: This includes two assisted breedings, either natural cover or with collection and insemination. It also includes two semen analyses, one at the time of each breeding. If a surgical insemination is indicated then the cost of anesthesia and the surgical procedure itself is additional.

These prices vary since they involve outside labs and testing materials. Please call for the latest price updates.