

Artificial Insemination of A Scottish Terrier At Home

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There are many variations of artificial insemination to consider. There is dog-to-dog artificial insemination, fresh-extended (chilled) semen insemination, and frozen semen insemination. Techniques of AI include vaginal deposition, surgical implant, and trans-cervical insemination. This guide is for the breeder who wishes to conduct an artificial insemination at home. With Scottish Terriers, in particular, it is often easier to AI than to wait for the event to occur naturally. It is also useful when the dog and bitch are of different heights. Research has shown that most semen preparations (fresh, fresh-extended or frozen) are effective if all things are equal. Results are always best when the semen is collected and deposited in a short time period into the bitch.

Over our 25 years of breeding, we have come up with procedures that seem to work for us and may be useful to other breeders. To complete the task, you will need:

Tools

1. Sandwich size baggie with no Ziploc top. Use 2, one inside the other in case one breaks
2. A 20 cc syringe (no needle)
3. A sterile 14 French silicone coated self catheter. We prefer Mentor Urology products. . We have found that size 14 FR fits a Scottish Terrier well. Make sure you get the 16 inch long catheter designed for onetime use. A pack of 10 can be ordered online for approximately \$10-\$25 on line. You may also purchase the tubing from local medical supply companies. Call first as not all medical supply companies carry self cauterization equipment. Compared to aquarium tubing or rubber breeding tubing, the catheter is more flexible. This makes it is easier to insert into the bitch's vagina up into the uterus. Because it is low in cost, a new sterile catheter can be used for each breeding. This reduces the likelihood of infection.
4. Sterile latex free gloves to wear while performing the AI.
5. A grooming table with a nonslip surface or a kitchen counter with a nonslip rug on top. We call it the breeding rug. And our stud dogs know when it is out, it is time for fun.
6. A clean, soft towel to wrap the female in while insemination occurs.

Steps in the Process

1. **Collecting the semen in the Baggie**

The process is best done with two people. One person will hold the male while he is collected. The other person will arouse the dog and collect the semen in the plastic baggie.

- a. Excite the male with the female. The dog and bitch should not have eaten dinner before the breeding. Otherwise the male may throw-up the food. Let them play together on the floor naturally. Allow attempts to mount the female. If a natural breeding occurs, so much the better. Alternatively, place the male on the breeding surface. Hold or wave the bitch in front of the male.
- b. Put the bitch aside, preferably in another room. This is so the male will focus on the task at hand.
- c. Hold the male from the rear. Stimulate the penis just before the scrotum. When done correctly, the penis will unsheathe and will swell at the point of stimulation. Hold your thumb and index finger directly in front of the bulbus glandis, near the base of the swollen penis.

- d. While keeping the penis erect, use your other hand to grab the baggie and place it over the penis ensuring that the end is contained inside the baggie. Carefully gather the baggie up and hold it in place and continue stimulation of the male (It is easier than this reads). A second person should hold the male from the front with one hand on the chest for support and the other arm behind the front legs. As the male is stimulated, he will behave as if he has mounted the female, and will crutch up with his front legs and/or jerk up and down. He may also attempt to turn as occurs with a natural breeding.
- e. Depending on the dog, the collection of the semen may take 5-15 minutes. On average, you will get 5-8 ml in volume. But we have had as much as 15 ml and as little as 2. The semen will be cloudy. Sometimes the fluid is just seminal fluid and is clear. It doesn't hurt to collect this fluid but you need to wait until you have an ample sample of cloudy semen.
- f. Continue stimulating the male. Sometime the fluid is slightly red. This is alright and relatively normal. It means that a small capillary may have broken.
- g. When the sample of semen seems large enough, remove the baggie. Place the dog in a crate after he has retracted his penis.

2. Putting the semen into the syringe

- a. Remove the connecting end of the catheter (not the tip with the small holes). Cut the catheter down in size slightly (about 2 inches). Connect it to the syringe.
- b. With the tube attached to the end of the syringe, insert the tube into the bag containing the semen. Tip the bag slightly so the semen gathers in one corner of the baggie. Draw up as much semen as possible into the syringe.
- c. Collect all the fluid in the bag. More does not hurt. Less is not problematic as it takes only a few live sperms to produce a litter. This is a good time to examine the semen under a microscope with the remaining semen. The eyeball approach also works. If the semen appears cloudy, it is usually good.
- d. Draw back the syringe so small amount of air is contained in the syringe along with the semen. The air will be useful during insemination. It will push the last drops of semen in the tubing into the uterus.

3. Inseminating the female.

- a. Bring the female back into the room. We find it convenient to sit in a chair. Drape the towel over your chest so her back legs over the left arm of the seated individual. In doing this, the head of the female will automatically be lower. The person will then need to hold or cradle the bitch in both arms. Remember, the bitch may not like the following process.
- b. The other person will perform the actual AI. With a gloved hand, insert a finger into the female's vagina. Generally, the index finger is a good size for a small hand (women). If the hand is large, a smaller finger should be used. Especially for new bitches, a lubricant should be used. It is best to insert the finger from below with the palm resting against the bitch. Insert the tubing along the outside edge of the finger. Feed the tube in slowly, until it is at the end of the inserted finger. The silicone tubing will usually, but not always, slide in easily. In some cases, it will feel as if the tubing goes up and over the crown before entering the uterus.
- c. Inject the semen slowly, while wiggling the inserted finger. The finger serves in the role of penis.
- d. Invert or elevate the bitch, while leaving the tube and finger inside. Wiggle the finger from time to time. One should feel natural contractions of the female. Tickling around the vulva of the bitch is useful to induce contractions. You may also move the back legs back and forth to help move the seminal fluid into the uterus. Hold this position for 20-25 minutes.
- e. Slowly remove the tubing and finger. Put the bitch into a crate for 8 hours to reduce her activity.

- f. The general rule of thumb is to breed the bitch every other day. However, we can usually tell by the reaction of the female if the breeding was "good." You can feel the contractions and the bitch usually licks her lips.

4. **Reusing the equipment.**

Throw out gloves and baggie after one use. The catheter and syringe can be rinsed and reused. Generally, reuse only for a complete set of breedings for one bitch.