

## **Breeding Your Bitch** *by Lynne Keyes DVM*

An adage from thoroughbred horse breeding goes “breed the best to the best and hope for the best”. This is true in Pug breeding, too. If you want to breed Pugs, get the best bitches you can from reputable breeders. With the help of your mentor, evaluate your bitches and list all faults no matter how small. When you look at sires you will want to discuss these faults with the sires’ owners to determine if the breeding has potential to improve upon your bitch (this is the ultimate goal). Remember that even though a dog is a big winner this does not mean his genetics will blend well with those of your bitch. Another adage is “every breeding is an experiment”.

Pugs (all oriental breeds) have their first season (heat) earlier than other breeds. First season is usually 6 months (range 5 to 9 months). You should not breed until the second or third cycle or 18 months, to allow her to reach physical and mental maturity. Use this time to study pedigrees, and breeding information as well as establishing a relationship with a mentor (ideally breeder of your bitch).

There are three types of breedings; line breeding, inbreeding, and out crossing. Line breeding is preferred by many breeders and usually results in uniform litters. This is breeding of grandfather to granddaughter, grandmother to grandson, cousin to cousin, uncle to niece, or aunt to nephew. Inbreeding is the breeding of closely related Pugs such as father to daughter, mother to son, or sister to brother. Outcrossing is the breeding of “completely unrelated pugs”. Outcrossing is actually breeding of individuals that have no common ancestors for over 5 generations. Outcrossing and inbreeding can be dangerous for a novice.

There are many methods to achieve a successful breeding of your bitch. These should be discussed with your mentor, and which one you decide on will depend a lot on the stud dog you have chosen.

Before the 21<sup>st</sup> century most breedings were natural or by artificial insemination (AI) by the stud dog owner. At that time general anesthesia was more problematic for our bitches and the risk of surgery was not worth the gain. Many breeders still breed “face to face” but the use of fresh chilled or frozen semen has

made surgical AI more common. The risk of anesthesia and infection are greatly reduced now, but are still higher for our Pugs than other breeds. Cost is also a consideration. Surgical AI is quite expensive. Also, some surgeons do not want to do surgical AI if the bitch is going to have a C-section (methods of whelping to be discussed in another section). A final method is trans-cervical AI which also requires special equipment and training but no abdominal incision or anesthesia. No matter which method of breeding you chose, the timing must be accurate or the breeding will fail. The gold standard in timing is progesterone testing. This will allow you to accurately time your breeding and time the date of whelping.

As a novice breeder you will need to do your homework and discuss each step with your mentor. There are many good books on breeding. My favorite is “Canine Reproduction A Breeder’s Guide” by Phyllis A. Holst, MS, DVM. This book is older but very informative and easily understood by the novice. Another is “Canine Reproduction and Neonatology” by Dr. Marty Greer, DVM. This is thorough and up to date. On line sources of information include breeder and veterinary web pages and pod casts. Dr. Greer has excellent webinars on YouTube, such as “Passport to Dog Breeding Success”  
<https://www.youtube.com/watch?v=KKCe1jFjK4Y> . AKC also has breeder information for beginners.