## The Breeding of Dogs

The two common practices in dog breeding are *outcross* and *line* breeding. Many people with little knowledge about dog breeding will ask questions using the phrases *pure bred*, *well bred*, *over bred*, *in bred*, or *line bred* without knowing what these terms mean. This can lead to a lot of confusion. Many of the people asking these questions don't understand the question they are asking, never mind the answer. Volumes have been written on the breeding of dogs, so it is impossible to cover every aspect in the contents of a single web article. However, I will try very briefly to explain what we do and what we do not do here at Kirby Mountain Sporting Dogs in order to give you an idea of what we are trying to produce.

## **Outcross Breeding**

Outcross breeding is much easier to explain so we will start here.

Outcross breeding is when you take a male and female dog of the same breed but have no relatives that are the same. It is similar to putting two dogs of different breeds together as they do not have any relatives. When you mix breeds or outcross in the same breed of dogs, the puppies could have three different looks. Some may look like the mom, some like the dad, and some may have neither the mother nor the father's appearance. In outcross breeding the appearance (similarities and differences with the parents) are immediately noticeable. However, the health and temperament of the outcross breeding takes longer to distinguish.

People often believe that, because the outcross is a blending of two non related dogs, there is an averaging of the parents' characteristics in their offspring. One would think that more blending of size, shape, coat, ear length, and temperament and health factors would take place. But this is not true, as I stated before, the puppies could look nothing like either parent.

One upside to the outcross breeding is a thing called *Hybrid Vigor*. Hybrid vigor means that when you cross breed you get healthier, stronger specimens. However, not all cross breeding produce hybrid vigor because this is not a perfect world. Obviously, you need to have two healthy, genetically clean parents to start—knowing the background of the sires and dams is important in any breeding. With a dog such as the Labrador Retriever, the #1 dog in America today, outcross breeding is a good breeding practice. Why? Because of its popularity, the demand for labs is high; breeding happens in order to keep up the supply for the demand; and along with all this breeding comes all the health ailments out there. Outcross breeding and sire/dam research can reduce the occurrences of these issues.

With outcross breeding there is a concern with performance. Pointing instinct, flushing instinct, and retrieving ability can be seriously diminished. It is important to mention here that diminished performance is a possibility with outcross breeding but with researching the performance histories of the sires and dams successful dogs can be produced through this kind of breeding.

## Line Breeding

*Line breeding* means breeding two animals of the same breed, within the same family. Typical line breeding practices are to breed a ½ brother to a ½ sister, a granddaughter to a grandfather, a niece to an uncle, and so on. Some people consider breeding full brothers to full sisters or fathers to daughters to be line breeding when in actuality this is called *in breeding*.

At Kirby Mountain Sporting Dogs, we use the practice of line breeding, but I will explain what in breeding is in order to show you why we do not practice in breeding. There are major reasons for this. Because the breeders using in breeding are looking for a diamond in the rough, they will forfeit the health and temperament of much of a litter in order to get one or maybe two

great dogs. In breeding may happen by accident where littermates may accidentally breed. However, some breeders plan such practices. Breeders of national caliber show and field dogs will partake in this breeding in order to produce the next national champion or superstar. If the litter has physical or temperament problems with some or all of the pups, the breeder is willing to take the risk for the chance of producing the future national champion. Breeders will often sell the inferior littermates at a discounted price and will label them as pet quality dogs. Through no fault of the puppy, it is actually a genetic time bomb waiting for something to go wrong. At our facility the health and temperament of all our puppies is a priority. We will not risk an entire litter for one superstar; therefore, we do not practice in breeding.

Line breeding is a less judicious process. The key to successful line breeding is HONESTY. You can kid yourself or be in denial or as we say in the dog world Kennel Blind. Line breeding has to be done one litter at a time. It needs to be evaluated and a judgment made as to whether it should be done again.

Line breeding can pass along physical, temperament, and performance traits: good and bad. If you breed two dogs with the same physical problems, you will probably have those problems with the pups. If you breed two dogs that are very timid, that trait will probably come out in the pups. Breeding two dogs with weak pointing or retrieving instincts will probably show through in the puppies. The upside in line breeding is that the puppies will have uniformity in color, shape, and size. You will have a litter of puppies that look alike.

Some breeders will line breed once or twice followed by an outcross and then breed back to the line breed family evaluating the puppies produced in each breeding. It is important to mention that a breeder should know as much as possible about the history of both the sire and dam in every breeding.

If this sounds confusing, that's because it is!

Best of luck,

John at Kirby Mountain Kennels March 2003