

Eugenics or Dysgenics

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Natural selection is nature's fail-safe way of maintaining eugenics (good genes and fine offspring). All dogs are different, (individual variation being an inherent characteristic of sexual reproduction), and different dogs fair differently in different situations. Dogs best suited to the immediate environment (the genetically fittest) do well; the less fit do less well; and the unfit usually die. In the wild, the process of natural selection promotes the survival of the fittest and ensures the elimination of nature's mistakes. With domestic animals, however, continuing improvements in veterinary technology and the practice of artificial selection allow breeders to mess with Mother Nature — sometimes for the better, but sometimes for the worse. Nowadays, the responsibility of maintaining a healthy gene pool and preventing deleterious effects on the line and breed (i.e., dysgenics) lies predominantly with the integrity of individual breeders.

Artificial Selection

The aim of artificial selection is to improve the gene pool along prescribed lines. However, extreme unilateral selection for specific characteristics, whether improved structure, appearance, or working ability, is often at the expense of other characteristics. What you gain on the swings you lose on the roundabouts! In addition to selectively breeding for specific coveted or beneficial traits, breeders must strive to maintain balanced and comprehensive selection criteria that ensure the general wellbeing of the breed. It is vital to consider the relative advantages and disadvantages of frequent outcrosses to similar but parallel (unrelated) lines, and periodic outcrosses to dissimilar lines. Ruthless line-breeding (father to daughter and brother to sister) causes the inheritance of bad qualities as well as good qualities. Breeders must equate potential breed-gains, (such as,

improved dentition, coat color, or body size) with potential or probable, breed-losses, (such as, sensory deficiencies, physiological abnormalities, decreased life-expectancy and the inability to mate or whelp). Best In Show honors tempt too many breeders to mate good-looking dogs, knowing full well they have serious anatomical and medical defects. Slash and burn breeding — destroying the forest for maybe one or two good crops!

Ironically, breeder-induced doggy dysgenics is most apparent in the realm of reproduction. There are many examples of purebred dogs that can not mate and of bitches that can neither whelp, nor care for their young without human assistance. If we are not careful, the term “breeder” will fast become a misnomer. Mixed-breed dogs seem to have few problems breeding and free-whelping. In fact, most of them manage to do it in public. So, what's the problem with purebred dogs?

Nature has a wonderful way to promote promiscuity, fertility and fecundity — problem-maters have no genetic representation in subsequent generations! During early domestication, there was a rigid selective pressure for breeding ability. Animals that could not, or would not, breed in captivity did not produce domestic stock, whereas good breeders passed along genes for good breeding to foster future generations of good breeders. For pet dogs, there continues to be a strong selection for breeding ability. Those that can't — don't, whereas those that can — sometimes do. And, by so doing, they pass on their genes for good-breeding to foster subsequent generations of good breeders. On the other hand, purebred dogs have been emphatically selected for breed-specific characteristics, and as a result, breeding ability and fecundity have suffered. Additionally, the elusive quest for the perfect body prompts many breeders to go to great lengths, employing various artificial means, to breed known poor breeders. By so doing, they are propagating a population of good-looking dogsthat cannot even reproduce by themselves — much like many modern-day plants. Thus, in the purebred environment, many individual animals and their genetic problems are artificially created, maintained and propagated by human intervention.

Veterinary Intervention

Veterinary science exists for the benefit of individual animals and for the betterment of the breed and species. Indeed, veterinarians frequently come to the aid of individual dogs, but sometimes, veterinary intervention may be detrimental for the breed as a whole. Improved veterinary treatment frees dogs from some of the natural selective pressures imposed by nature. Hence, in the domestic environment, many animals are allowed to survive and breed, which most certainly would have died

without such intervention. It is essential to distinguish between the fate of individual dogs and the fate of the breed. Of course, we would all do our best to save the lives of individual dogs, but it would be a disservice to future generations to breed such dogs and possibly pass on genetic defects, which could promulgate the very same problems.

Survival of the Unfit?

Some pups are born with physical defects. Others have less obvious problems and turn out to be “poor-doers” or runts. The question of what to do with the runt (or runts) of the litter, or puppies with physical defects, must be individually addressed by each breeder. The eugenic options include: culling the litter, letting nature take its course, or saving the pups but neutering them. Also, when a bitch rejects a pup, perhaps we should pay heed to her decision and most certainly neuter the pup should it survives. The pup may grow up to be a marvelous companion dog, but not a breeding prospect. With two sickly litters from the same dam it would be prudent to neuter the dam. Perhaps she has a predisposition to infectious disease, which may be passed to her offspring.

Breeding the Unfit?

Many purebred dogs need help to breed: holding the bitch and/or male dog, guiding the penis into the vulva, and in some cases resorting to artificial insemination. Sometimes heroic efforts are needed just to stimulate interest in breeding activity.

One might argue that man-made, purebred dogs were not meant to exist in the wild, but that does not mean, that they should not be able to lead long and healthy lives and be able to reproduce by themselves. Aside from the obvious, that inability to mate and care for young is both unnatural and unhealthy, there are sound utilitarian reasons why natural mating and maternal behavior are important. Natural mating and courtship and even the sight, sound and/or smell of a member of the opposite sex stimulate the production and release of the pituitary hormones, that control ovulation and the number of ova released, i.e., courtship improves fertility and fecundity. Most important though, natural mating and maternal behavior are essential. Courtship is nature's temperament test and natural maternal care lays the very foundation for puppy socialization and learning bite inhibition.

Natural Mating

Courtship comprises a species-specific, stereotyped choreography of behavioral interaction. Thus, the bitch is afforded the opportunity to evaluate her prospective mate's mastery of social intercourse prior to sexual intercourse. Successful courtship is proof that an excited male dog may interact appropriately, without fear or aggression. Despite several

thousand years of selection for promiscuity in domestic dogs, many bitches still remain highly selective in their choice of mating partner. And the most common reason for a bitch to refuse a stud (aside from her not being in estrus) appears to be that the male was antisocial, asocial, or naive or clumsy in his advances, or that she simply didn't fancy him. To put it simply, courtship weeds out potential studs that do not have the requisite social savvy or attractiveness (whether the male dog's lack of socialization is due to experiential deficiency or some inherent predisposition). We have to raise a huge red behavior/temperament warning flag, if a dog lacks the desire, ability or social savvy to mate. To muzzle or restrain fearful or aggressive dogs to get them to mate is just too silly for words. Who on earth would want to mate a dog to one with obvious temperament problems? Moreover, I can think of only one acceptable reason for artificial insemination — when dogs are separated by large distances. It is often much cheaper and more convenient to transport semen than the dog. However, unless we are talking about an extremely rare breed, it would be a mite pompous to assume there is not a good mating prospect within driving distance. Artificial insemination is not wise if the male dog is injured, diseased, or dead. Perhaps the dog has an inherent disposition for injury (e.g., weak bones or joints), disease, or early death. In any case, why inseminate an extant bitch with sperm from an extinct male. If the purpose of selective breeding is to improve genetic stock, why use old-fashioned and out of date sperm? Owners of bitches can afford to be and indeed, should be, extremely choosy when selecting a prospective stud because genetic change within a breed is effected extremely quickly and dramatically via male dogs. Whereas a bitch's genes are passed along to only a score or two of pups in her entire reproductive career, a stud's genetic moiety may be passed on to twenty pups in just a couple of days! Genes from far too few male dogs are overrepresented in the gene pool of many breeds. Whereas this is the prevailing sexual strategy for many animals, (e.g., cattle, sheep, chickens), it is unnatural for dogs. A bitch's much greater temporal and physiological investment in her young is protected by preferential mating, i.e., her selection of a preferred partner. Hence, if we are to choose a stud for a bitch, we should do so with extreme discretion and also, we would be wise to at least consider her preferences.

Natural Whelping and Maternal Care

Elective Caesarians are surprisingly common, especially amongst large-headed/narrow-pelvic breeds and many toy breeds. If an elective Caesarian is thought to be necessary, then for Heavens sake, don't breed the bitch in the first place. Why breed a bitch when you think that her

pelvis might be too small to give birth naturally? Why perpetuate a line of dogs with pelvises too small to give birth? It is unfair to subject the bitch to a major operation, which could be life-threatening if not performed on time. And it is unethical to perpetuate iatrogenic problems.

If an emergency Caesarian has been necessary to save the life of the dam and her litter, breeders should consider spaying the bitch and neutering the offspring. If a Caesarian is necessary on a subsequent whelping, breeders should definitely spay the bitch and neuter her offspring (males included) from both litters.

There are simply no excuses for artificially breeding dogs that cannot give birth naturally. There are still many free-whelping Bulldogs, Bostons, Frenchies, Yorkies and Chihuahuas, which may be bred with healthy, mature, good-looking males. Certainly coat color, conformation and cuteness may take a bit of a hit for a couple of generations, but certainly nothing that educated selective breeding cannot resolve in a few more generations.

Elective Caesarians usually have profound and long-lasting, deleterious effects on puppy temperament and the development of bite inhibition. Maternal behavior is precipitated by the many hormonal changes that occur during parturition. Parturition and maternal behavior are augmented by sensory stimulation as each fetus passes through the cervix, by the bitch licking the amniotic fluids from the pup's pelage, and by the pups' nursing. To perform a Caesarian before the bitch comes into whelp, risks the likelihood that she will be disinterested in her offspring, or may even attempt to harm them. Such pups have to be hand-raised and are thus deprived of the bitch's colostrum and passive immunity against many serious diseases. Additionally, pups are deprived of primary social interaction with the dam, i.e., the equivalent of behavioral immunity from future adult behavior and temperament problems. Lack of maternal care is the harbinger of dog-dog temperament problems. A vicious circle is quickly established — asocial dogs are less likely to socialize and hence, more likely to become antisocial, i.e., fearful and/or aggressive towards other dogs.

When maternal behavior goes awry, the development of bite inhibition is put on hold. Normally, during passive and active weaning, the bitch responds to over-aggressive nursing, or whenever the pups bear down, or nip at her teats.

There is no earthly reason, why all breeds of dog should not mate and whelp normally. It is just as easy to vigilantly select for good breeding and fecundity, as it is to select for conformation or working ability. The problem is simple — whereas there has been a strong artificial selection

for large heads in many breeds, there has been no obviously necessary, concomitant selection for large pelvises. So... let's select for adequately-gauged birth-canals now! Only mate bitches that are descended from free-whelping lines, or proven bitches, that have previously always whelped naturally and successfully raised their young.

Life Expectancy

Many breeds of dog have a shockingly long list of breed-specific health problems and as a result, many purebred dogs die at a young age. Again, there are simply no excuses for purebred dogs not living long and healthy lives. It is as easy to selectively breed for health and life-expectancy as it is to breed for coat color or conformation — only breed dogs free of breed-specific diseases and only breed old male dogs. There is no better index of a dog's robust genotype, health, behavior and temperament, than living to a ripe old age. Since male dogs have such a colossal impact on the gene pool of any breed, let's only breed male dogs of at least seven years of age. There are a bunch of 16 year-old Dobies, Boxers and Newfies just waiting in the wings. They've made it to 16 years, so, "Let's put them in coach!"

Breeding Program

Each time veterinary intervention is necessary to save the life of individual fetuses, puppies, or dogs, the breeder should consider neutering that individual. If human intervention would be necessary to create the life of individual dogs, it is seldom in the best interests of pure-bred dogs to breed the dogs at all.

A simple breeding maxim: "If you even think there is anything weird about a dog, then don't breed it." Instead, for at least three breeding generations, let's go back to step one and selectively breed for natural mating, natural whelping and long life-expectancy (health). Preferentially breed healthy male dogs at least seven years of age, (with no obvious deficiencies or defects, no predisposition to breed-specific disease, and descended from similarly healthy, long-lived forebears), with proven bitches of similar progenitors, all of which have courted, mated and whelped naturally and successfully raised healthy pups that lived to a ripe old age.

When we give our hearts to a young pup, it would be so reassuring to know that the dog's sunset years are likely to last well into his mid-teens. Remember... *"A living dog is better than a dead lion."*