

## GENETIC DEFECTS, ASSESSMENT and CERTIFICATION

(In collaboration with Bruce Roberts – founder of Zenfro Kennels, New Zealand)

No sane person purposefully sets out to breed dogs with genetic defects. Unfortunately there are some insane people out there. In an ideal world we would breed Malamutes that are free from all genetic problems. But the knowledgeable and pragmatic breeder realizes this is not possible and that all living organisms carry lethal genes. The art of breeding is to limit the physical and mental effects of these genetic glitches. When we are breeding dogs that are closely related genetically there is obviously a greater possibility of these defects surfacing. However, if we wish to establish a line of dogs that are similar in type this is our only option. It really is a catch 22, damned if you do, damned if you don't. Therefore the knowledgeable and pragmatic breeder must be aware of these defects in their lines and be careful not to perpetuate these problems. This is where it is vital to select only the best dogs for breeding.

If we eliminate a dog from our breeding program based on just one problem, then we are "throwing out the baby with the bath water". This is where the knowledgeable and pragmatic breeder must exercise good sense and judgment. They must prioritize limits and what is acceptable. For example if a top quality bitch has a hip score or rating that we consider marginal do we not breed her or do we use this knowledge and select a stud for her that has apart from all the strengths that she requires, excellent hips from a line of dogs with excellent hips? I prefer the latter option. Or if she has cataracts does this necessarily eliminate her from our breeding program? I don't think so. If we eliminated every dog with a genetic defect from breeding then there would be no dogs left to breed.

Unfortunately there are literally dozens of genetic diseases affecting the Malamute including thyroid issues, coat funk, immune deficiencies, epilepsy - and the list goes on. The trick is to prioritize these problems based on how they affect the quality of life of the dog. For instance, I regard epilepsy as the most serious of conditions and will not breed to it under any circumstance, period. Immune deficiencies come in a close second, but are much more difficult to avoid as they are much more common. On the scale, as another example, hip dysplasia is a far more serious problem than, say, cataracts, as a blind or partially blind dog can still have a good quality of life, and because the hearing and smell senses are as important to a dog, if not more so, than sight, whereas degenerative joint disease means the dog is in constant pain and discomfort. So, the dog with degenerative joint disease (hip dysplasia) has an infinitely lower quality of life than the dog with cataracts.

My breeding stock are all scored for Hip Dysplasia via x-rays sent to OFA, and although the results are not used as a determining factor, they are part of the assessment of the overall picture pertaining to the suitability of the dog as a breeding animal.

Through the Alaskan Malamute Club of America most of my dogs have ChD numbers, or probability numbers, for the genetic condition of Chondrodysplasia (ChD). The fact that these numbers are only a probability, and the mathematics used to derive them highly problematic and controversial, they are, therefore, not a 'clearance' for this condition, as some would have us believe. In fact, dogs with a rating certificate have produced Chondrodysplastic pups, a truth deeply buried by some breeders and unknown to others. Today one doesn't even get the probability percentage! So, the act of getting a ChD number is a meaningless exercise and I will

no longer do these numbers because of how meaningless they are. When the proposed and hopefully far more reliable DNA test is available I will then test my dogs with a method that has at least some degree of reliability.

I will no longer get a Canine Eye Registration Foundation (CERF) number as the cost is prohibitive and, like the ChD number, is an assessment only for that moment and the past of that dog. It says nothing of tomorrow. The CERF number is not a clearance for the future and the number by itself is of no use in determining if the parents, or their offspring, will not have some eye condition in their future. Tests for the eyes of my dogs are done through a trusted veterinarian experienced in canine ophthalmology. From him I will get documentation that there is no present condition and this will be passed along to a potential buyer or breeder.

It is unfortunate for novice breeders to suddenly become 'expert' with their dogs simply by acquiring these 'clearances' that are truthfully in themselves meaningless. Breeders must KNOW their line, and the lines of those they breed to, in order to better be able to ensure the quality of the animals they breed rather than to rely on these misleading certifications. Many of these 'certification numbers' are merely a means for breeders who have not done their research to have the paper to point to and blame when things go bad, rather than accept the fact the breeder did not fully research his animals and admit their lack of knowledge of the stud or the bitch. So, if you are a buyer, beware of the novice breeder who has not done their research and of the established breeder who lends too much emphasis and credence to the clearance papers alone.