



### **Keeshond Health Testing Recommendations**

When you are searching for a new Keeshond puppy, it's always a good idea to make sure that it was thoughtfully bred with the puppy's long-term health in mind. Conscientious and responsible breeders conduct health testing of their prospective sires and dams **BEFORE** they make any decision to breed.

Breeders do this in an effort to lower the incidence of orthopedic and genetic diseases in their litters and to maintain and protect the long-term health of their breed. Responsible breeders have the results of their health testing registered with the Orthopedic Foundation for Animals (OFA) and maintain copies of the test results/registration certificates for examination by their prospective puppy buyers.

At a minimum, Keeshonden used for breeding should be checked for:

- Hip Dysplasia – this orthopedic disease is a malformation of the hip joint. Hip dysplasia can lead to joint inflammation, pain and lameness in affected dogs. To evaluate this, the prospective parents of a litter are x-rayed according to either OFA or Penn HIP protocols, and the radiographs are evaluated and graded by a panel of orthopedic specialists.
- Elbow Dysplasia – developmental abnormalities of a dog's elbow joint can be inherited. Poorly formed elbows can lead to forelimb lameness in dogs. To evaluate this, the prospective parents of a litter are x-rayed according to OFA protocols and the radiographs are evaluated and graded by a panel of orthopedic specialists.
- Patellar Luxation – poorly formed stifle joints (knees) can cause a dog's knee to be prone to popping out of place. The presence of this heritable orthopedic disease is evaluated and graded during a physical examination of the knee joint conducted by a qualified veterinarian
- Hereditary diseases of the Eye – there are several hereditary eye diseases from which dogs may suffer. To check that these diseases are not present, breeders will have the sire and dam examined by a veterinary ophthalmologist (an eye specialist) and will have the findings of the exam registered with either the Canine Eye Registration Foundation (CERF) and / or the OFA. Because a dog's eye changes over time and some hereditary diseases do not evidence themselves until later in a dog's development, OFA exam registration numbers are only valid for 1 year. Check to see that the sire and dam's eyes were evaluated within a year prior to the mating which produced the puppy's litter.

Whenever Keeshonden are bred, attention should also be paid to the presence or absence of the gene for Primary Hyperparathyroidism (PHPT). PHPT is a disorder of the parathyroid glands which causes them to secrete excessive amounts of parathyroid hormones and can lead to too much calcium in a dog's bloodstream. This, in turn, can damage the dog's kidneys. This disorder

is inherited but a test to identify the presence or absence of the gene which controls the disease is available. The sire or dam may also be absent of the gene by descent (previous generations having absence of the gene). You should always discuss the presence or absence of the PHPT gene in the sire and dam with the puppy's breeder.

Approved by Keeshond Club of America Board of Directors – December 7, 2015