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Testing, Testing.... Linda Aronson, DVM

You will often hear that you should have your beardedie tested, but which tests? Here I will attempt to explain which tests should be done on beardedies and when.

Genetic testing

These tests should obviously be run for all dogs that you are planning to breed, or breed to, but there is a lot to be said for running them for pet dogs to find out what your line is producing, so where there is an *, I would consider this test essential for a performance dog to ensure that you are not asking for physical effort beyond the dog's capacity.

Hips *: Hip dysplasia can be crippling in some dogs and require early euthanasia or hip replacement to resolve. While performance dogs may develop sufficient musculing to allow them to perform with mild or borderline dysplastic hips, the added stress may increase their risk of arthritis and lameness later. Hip dysplasia is not a single disease, and at least 10 different areas are assessed.

In the US, the Orthopedic Foundation for Animals (OFA) is most commonly used. Preliminary results can be obtained for animals under 2 years, but all animals 2 years and older should have a permanent hip score. Scores of Excellent, Good and Fair are issued for dogs deemed to have acceptable hip conformation; mild, moderate and severe for dysplastic hips, and borderline for hips that should be re-evaluated in 6 months.

PennHIP (University of Pennsylvania Hip Improvement Program) is another method for evaluating hips. As well as the hip extended X-ray view, two other views - distraction and compression – are evaluated. The report issued measures joint laxity, congruity and evidence of Degenerative Joint Disease. PennHIP X-rays taken at 6 months are predictive of adult hip conformation; however, few beardedies have been evaluated by PennHIP, and heritability has not been determined for the breed.

Other hip evaluations done elsewhere in the world resemble those done by OFA. In Canada, the Ontario Veterinary College (OVC) deems hips pass or fail. A comparison of scoring by the FCI (Europe), BVA (UK and Australia) and SV (Germany) will be found at the BCCA website.



Library Article

Note: Bitches should not be evaluated when they are in season or within 10 weeks of their season.

Elbows * Elbow dysplasia is even more devastating for performance dogs than hip dysplasia. Because there is limited musculature the body cannot compensate for poor structure. Elbows are assessed by OFA. X-rays should be taken in sedated dogs to ensure that the elbow is fully flexed as, unlike with hip evaluation, poor positioning (incomplete flexion of the joint due to muscular resistance from the dog) will be mistaken for dysplasia by the radiologist. Elbows are rated normal, or Grade I, II or III dysplastic. Elbow dysplasia, like hip dysplasia, is a blanket term and covers three distinct disease processes – ununited anconeal process, osteochondrosis and fragmented medial coronoid process –the last being the most common.

Eyes: In the United States, the Canine Eye Registration Foundation (CERF) compiles data gathered by board certified veterinary ophthalmologists. Even if you do not choose to apply for a CERF certificate for your dog, or your dog fails the CERF test, the data collected will be submitted to CERF. Heritable eye problems can occur later in life, and it is recommended that dog's eyes be tested annually until age 7 or as long as the dog is being used for breeding. Cataracts of various kinds and retinal dysplasia are the most common problems in beardies.

Thyroid *: Healthy thyroid levels are essential for normal functioning of all body tissues including the mind. Behavioral problems are often the first indication there are thyroid problems. Autoimmune thyroiditis is also predictive for other autoimmune diseases developing. Like eye diseases, thyroid problems can occur at any age, and testing annually or bi-annually for the life of the dog is recommended. A simple Total T4 test will not give sufficient information about your dog's thyroid health. Two-thirds of the thyroid will be afunctional before TT4 falls below most lab's normal. The OFA thyroid test measures free T4 by equilibrium dialysis, canine thyroid stimulating hormone and thyroglobulin autoantibodies. Also acceptable is a thyroid panel including Total T4 and T3 levels, free T4 and T3 levels, and levels of T4 and T3 autoantibodies. For reproductively active dogs, performance dogs and especially young dogs, the first 4 levels should be in the upper 75% of lab normals.

Von Willebrand's Factor: Von Willebrand's disease is a bleeding disorder which has occurred in the breed. It is only necessary to test the von



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Willebrand's factor once. This information is especially useful if your dog ever has surgery, and some beardies have bled to death on the operating table.

Before Breeding: Brucellosis tests should be run on bitches several weeks prior to breeding and on stud dogs at least twice a year. Fortunately, this disease is rare in most of the United States, but it causes infertility, abortions, as well as arthritis, disc disease, fever, hind limb weakness, lethargy and swelling of the lymph nodes. Once a dog has brucellosis it is infected for life and can pass the disease to other dogs.

Wellness testing

Taking your beardie to the vet once a year is no longer about getting vaccines, it is about thoroughly checking him out for other problems. As Beardies age - they do this at different rates, but I would say by the time most Beardies reach age 12 or 13 - wellness visits should increase to twice a year. Let your vet know of any changes in energy, mental ability, behavior, vision, hearing, eating, drinking, peeing and pooping that you have seen since the previous visit. Obviously, if these changes are sudden or severe you will take your beardie to the veterinarian immediately.

CBC, biochemistry profile, urinalysis: The big three give you so much information about your dog's health. The Complete Blood Count measures red and white blood cell and platelet numbers, looks for abnormal types of blood cells, parasites, etc. The biochemistry profile looks at the health of kidneys, liver, pancreas and muscle. It also looks at electrolyte levels, glucose, protein, fats and acid-base levels. The urinalysis tells you a whole lot more about kidney function as well as the general health of the animal. Baseline values for these from a healthy animal can also help your vet evaluate the meaning of values when your dog is sick.

Other tests: These will be more regional, and include testing for heartworm, infection with the local tick borne diseases, etc. A fecal exam is usually part of the wellness check. Be sure to bring enough, and ask how the sample will be examined. Centrifugation is best. However, because eggs are not always shed, or there are too few intestinal parasites, infestation may be missed. You may also choose to titer your beardie for protection against a variety of diseases for which vaccines are available; to make sure he is well-protected still. Of course, if your beardie isn't well, or something shows up on the



Library Article

wellness check, your vet may order more tests to determine exactly what is going on. Don't under-estimate the physical exam. A good veterinarian can tell so much by feeling, looking, listening and smelling. Finally, make sure you know how to take your beardie's temperature, respiratory rate and pulse (heart rate), and know what is normal for your dog at rest and when he is excited or has been exercising. You are your beardie's closest observer, and knowing when something isn't right, you can make sure he gets the help he needs as soon as possible.

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