Tan Point Genetics and the Griffon

An AWPGA Board Report

So…how do you recognize a Griffon affected by the "Tan Point" gene? The accompanying photographs show Griffons who are affected. Essentially, the affected dog will normally have a tan spot above each eye, a tan muzzle, tan on the legs below the elbows, tan hair in the ears, and tan around the anus. Some more severely affected dogs can also have a tan blaze across the chest. As we know it now, this is strictly a cosmetic affliction leading to an atypical appearance. If your dog doesn't display these attributes, it doesn't rule its possibility out as a carrier of this gene.

In basic terms, there are three DNA profiles your dog could have when tested for the K Locus. The first is an **Clear** dog (one that neither shows tan points nor is a carrier), reflected as KB/KB. The second is a **Carrier** dog, reflected as KB/ky. Finally, an affected and therefore **Tan Point** dog, reflected as ky/ky.

How do we get them? Here's what various breedings would produce (all percentages represent puppies in the resulting litter).

Carrier to **Carrier** - approximately 25% will be Clear, 25% will be Tan Point and 50% will be Carriers. These percentages are not firm and can vary from litter to litter.

Clear to **Carrier** - 50% will be Carriers and 50% will be Clear

Tan Point to **Carrier** - 50% will be Tan Point and 50% will be carriers

Tan Point to **Clear** - 100% will be Carriers

Tan Point to **Tan Point** - 100% will be Tan Point

Note: It takes just one puppy in a litter to indicate that both parents are carriers.

The $64,000 question remains, "Where did this come from?" This we don't know for sure and can only speculate. However, it's our understanding the French have been seeing Griffons with atypical coloration since the 1970's.

We do know of a handful of dogs that are known carriers based on their production of these puppies. Based on this handful of dogs and their past breeding, there are a few thousand carriers and many who are producing carriers today. Testing can be accomplished by two labs; Veterinary Genetic Services (www.vetgen.com) and Health Gene (www.healthgene.com). These tests range from $55-$65. We have validated the tests provided by VetGen by testing dogs either known or expected to have specific results and these results returned as expected.

This concerns the AWPGA Board to a level to have appointed a special Health and Genetics sub-committee to look into this and provide recommendations to the Board on how to reduce the spread or eliminate this from our gene pool to the fullest extent possible. They will also suggest protocols for guaranteeing the integrity of the testing process. This subcommittee is chaired by the Health and Genetics Chair, Katherine March and is made up of the following members: Lisa Boyer D.V.M., Phil Wolthuis, and Philippe Roca.

If you have produced any Tan Point dogs, please let the Health and Genetics committee know about the breeding that produced it. Also, if you have any additional input or suggestions, provide them to the committee or a Board Member. Bottom line…we want to remove the Tan Point gene from the Wirehaired Pointing Griffon gene pool. Please read the following article written by Dr. Sheila Schmutz on the genetic make-up of this gene and view the photographs to help you to further identify this gene in your Griffon.