Some Facts On PennHip

Due to the temporary absence of the Vizsla News, the following information is being distributed to summarize some of the main points of the PennHip system.

- PennHip compiles statistics by breed semi-annually from its collected radiographic data, which is currently released only to participating PennHip veterinarians.

- PennHip is currently a closed database, so the public cannot research or make inquiries on specific dogs. PennHip recently raised their rates however, to fund the development of an open database of dogs in the breedable range whose owners have signed a release at the time of application.

    Until PennHip has a publically accessible database, it is up to the owners of PennHipped dogs to disclose their Distraction Indices, Percentiles, and whether or not DJD (Degenerative Joint Disease) was detected.

- The PennHip radiograph series consists of 3 views: Hip-extended view (same as OFA view), compression view, and forced distraction view. One could complete both PennHip and OFA screens in the same radiograph session by taking an additional extended view to send to the OFA. Radiographs for submission to PennHip may only be taken by PennHip-trained and certified veterinarians.

- PennHip looks for evidence of Degenerative Joint Disease (DJD/aka Osteoarthritis) and measures the maximal amount of Passive (forced) Laxity, which is quantified as the **Distraction Index (DI)** or amount of looseness of the femoral head in the acetabulum, or hip socket. A low number DI indicates a "tight" hip, while a high DI number indicates a "loose" hip.

    PennHip states that according to their research, passive hip laxity is the primary risk factor for developing degenerative joint disease (DJD) but also that susceptibility based on DI is breed-specific, hypothetically due to conformational differences and muscle mass. In their study, Goldens, Rottweilers and Labs were more DJD-resistant than German Shepherds within the same distraction indices. Hence each dog breed has a different range of distraction indices that are considered acceptable.

- **PennHip Evaluation Report**: Each hip (left and right) is individually evaluated for DI, DJD, Cavitation & Other Findings. A Laxity Profile Ranking interpretation indicating the Percentiles and the total number of dogs in the database cross-section is given, along with the median DI for that group.

- PennHip uses a standard deviation curve. **Percentiles** are a comparison based on a cross-section of the total data up to that point in time.

With Percentiles, the higher the number, the better the hip. (Just the opposite when speaking of DI, in which the higher the number, the more likely the hips are to develop DJD) For example, a dog with a DI in the 70th percentile would indicate that this dog had tighter hips than 70% of other dogs evaluated in this breed to date, and that 30% of the dogs evaluated had tighter hips than this dog.

As more dogs are added to the database the curve will change, so what was a 90th percentile rating in the early years of PennHip among a smaller number of dogs will shift downward as the total breed database increases in number and the curve broadens.

- The current PennHip database as of February 2008 consists of:

    390 Vizslas

Lowest DI (desirable)	0.17
Mean DI (average)	0.42
Highest DI (undesirable)	0.90
75th percentile (desirable)	DI 0.32
60th percentile	DI 0.36
50th percentile (average)	DI 0.39
25th percentile (less desirable)	DI 0.52

- Based on the most recent statistical report, **PennHip currently recommends the breedable range for Vizslas to have distraction indices (DI) in the 60-90th percentile range, with no DJD.** This recommendation will also shift over time as the curve broadens.

- It is possible that a dog with an OFA Good rating could receive a low percentile PennHip rating, or a Fair OFA dog could rate a high percentile PennHip rating, which could be useful information when making breeding decisions for these dogs. It is unlikely, however, that a dog with a failing OFA rating would rate a high percentile PennHip.

- Vizsla breeder/PennHip-certified veterinarian Nancy Boggs Heinold DVM has been using PennHip in conjunction with OFA radiographs for the past 10 years in her own breeding program. In the case of a dog or bitch with a low percentile DI+OFA Normal or Non-PennHipped+OFA Normal dogs with above-average field ability and no obvious flaws, she advocates partnering with a proven mate in the 90th percentile to put strong selection pressure on improved hips in the offspring.

For more information, refer to PennHip's website at: http://www.pennhip.org

~ Pam Hidaka, VCA Breed Improvement Chairman