Health Screening Goals and CERF Elsa J Sell, MD

Background.

There are several reasons for carrying out health screening in purebred dogs. One is to assure that sires and dams are free of the heritable diseases detectable by the test. It is also valuable to know that other related animals are also free from these inherited conditions, so the more information available on their parents, siblings and previous offspring the greater the assurance that they do not have or carry for that condition. Another reason is to determine that a dog is free of a problem which might impair training/or performance and that it is capable of the work it is asked to do.

For years, the only disease that could be screened for was hip dysplasia with hip x-rays taken in a predefined manner and read by a panel of orthopedic experts. Now it is possible to screen for hip problems using additional radiographic views such as hip laxity evaluation (Penn-Hip), eye problems with ophthalmologic exam and/or genetic tests, elbow dysplasia with x-ray, hypothyroidism with various thyroid panels, and for an increasing number of genetic disorders - which may be specific to one or more breeds - with a variety of genetic tests.

The Canine Health Information Center (CHIC). This is a centralized canine health information database in the USA that is jointly sponsored by the AKC Canine Health Foundation (CHF) and the Orthopedic Foundation for Animals (OFA). Originally it was established by AKC CHF as a way to encourage more health testing and sharing of information using a database system managed independently of parent clubs. Parent clubs determine the health screening tests required for individuals of their breed to be included in CHIC; if the specified tests are done a dog receives a CHIC number. There is no requirement that the screening tests be normal. Obviously, it is desirable that those screens should be normal in a dog used for breeding.

<u>Ethics and Health Screening for Breeding Dogs.</u> Keep in mind that the goal of health screening is to reduce the possibility that progeny will develop a heritable condition that is detectable by a health screening test.

Logically then, the only effective method for reducing heritable conditions for which there is a health screening tool, is to administer the health screen sufficiently in advance of the breeding to have the test results prior to the breeding. It is useless to do the test on the day of breeding or two months later when the litter is whelped – all the while hoping that the results will be normal – or if there is a problem, hoping that pregnancy wasn't achieved. You're playing with fire if you adopt the approaches of not following the recommended testing ages or times. You're also denigrating the reputation of the parent club and breeders who are responsible in their practices. Finally, you feed into the animal rights groups' activism which can bring unpleasant attention to a breed or the dog fancy as whole.

For the future well-being of the breed, breeders have to place breed health high on their list of considerations. If they don't, we are all going to pay enormously for the omissions of today. The BCCA has a Code of Ethics, rarely enforced; nevertheless, #1 states: "All members shall maintain the best possible standards of health and care of their dogs and" In plain English this means that if there is a health screening test to rule out hip dysplasia or heritable forms of cataracts, it should be used.

Bearded Collie Litter Listing.

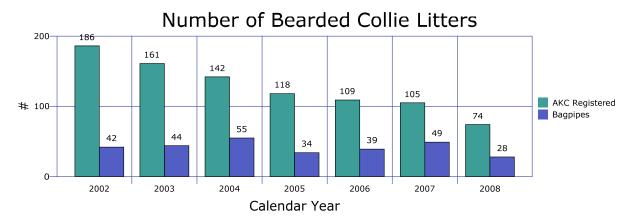
Litter listings began in September 1994 first in the BCCA Newsletter (the name of which was changed to Bagpipes in June 1997). Hip clearances for sire and dam were required for the listing starting in September 1997. Copies of preliminary OFA evaluations - acceptable for animals under 2.5 years of age only - and those from other registries besides OFA must accompany the litter listing application. No additional screening tests have been required; although breeders are encouraged to include CERF, thyroid screen, elbow and CHIC information, very few actually do.

BCCA and CHIC. In 2000 the BCCA joined CHIC. Parent clubs select the requirements that best meet their needs, and the BCCA board chose screening tests for hips, autoimmune thyroiditis, and eyes with elbow evaluation as optional. Hip and elbow are one time evaluations by either OFA or OVA (Ontario Veterinary College) if performed once a dog passes 24 months of age. Eye screening by the Canine Eye Research Foundation (CERF) is to be done each year until age 5, then every 2 years. Autoimmune thyroiditis screening by an OFA approved lab is to be done each year until age 5, then every 2 years. At present (Feb 26, 2009), 162 Beardies have CHIC numbers. Even with the advent of CHIC and an effort a few years ago to extend required health testing for the litter listing, the number of dogs being tested is disappointing.

CERF Screening of Litters Listed in the Bagpipes, 2002-2008.

I was curious to see what change in breeder practice regarding health screening would have to occur if the litter listing were to require a current CERF for both sire and dam. A current CERF means a certifiable exam in the prior 12 months. I reviewed all unique Bagpipes' litter listings for 2002-2008. Sire, dam, and date of birth for each unique litter were recorded. Then the CERF web site was used to determine if the CERF at the time of breeding of a litter was current for 2002-2004 and the OFA web site was used for the years 2005-2008. The earlier years' data were reported in the fall 2005 issue of Lighting The Way (BeaCon's biannual newsletter).

<u>History of Litter Numbers.</u> The first graph shows a comparison of the number of AKC registered litters and those in the Bagpipes litter listing.



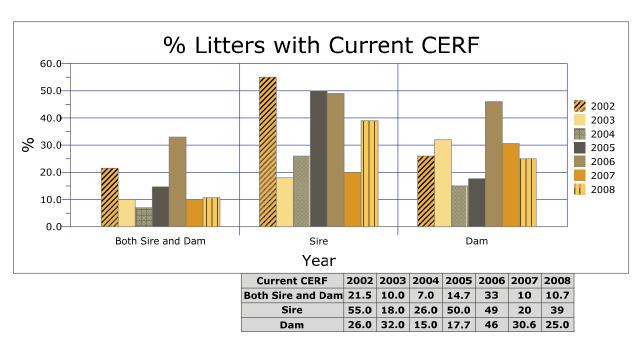
The reasons for the differences between these two sets of numbers are not known with certainty. Obviously not all breeders are members of the BCCA. Some litters listed though will be registered with the Canadian Kennel Club, and possibly other registries. Other breeders will use other means to advertise their litters than the Bagpipes. Some dogs may have been found dysplastic or lack hip screening by OFA or other approved registries. The latter has been required since September 1997. The

old adage that bears repeating is that if you can't find an OFA certificate listed under a dog's name on the OFA web site (www.offa.org), you should wonder why and consider the possibility that x-rays were obtained but showed evidence of dysplasia. You should think this way if you are planning a breeding or buying a puppy from a litter where a sire or dam doesn't have an OFA hip number. There is the outside possibility that there was a name misspelling and OFA couldn't match a name with the AKC registration name. However, conscientious breeders would have found that error and gotten the error corrected. Don't get hoodwinked; ask to see the original certificate. If it is not forthcoming, go elsewhere.

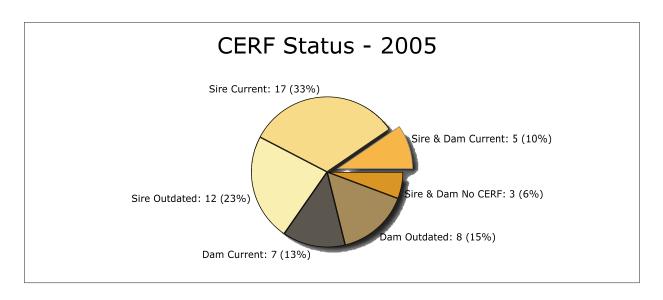
There has been a steady decline in the number of litters, shown to be statistically significant in an article in Lighting the Way in recent years. We should wonder where the decline will lead the breed if the trend continues for another 7 years; will there be any Bearded Collies bred?

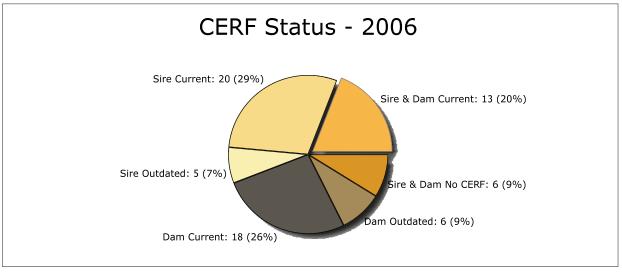
CERF Evaluations.

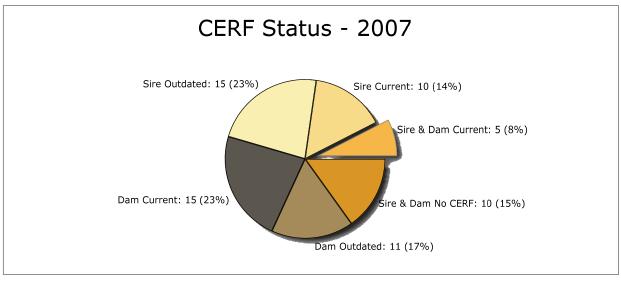
The next graph shows the percentage of litters for which one or both parents had a current CERF – either both sire and dam, or sire only, or dam only. The best result was achieved in 2006 when 33% of the litters had both sire and dam current on CERF.

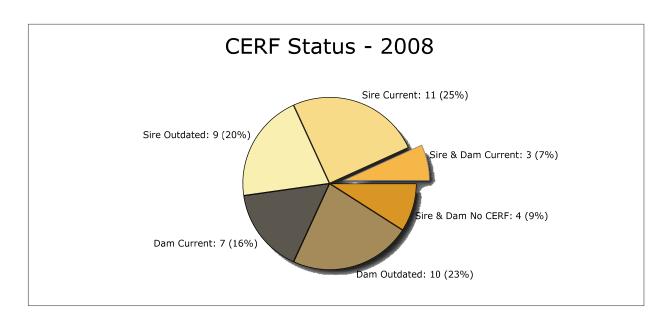


he remaining pie charts show by year (2005-2008) the number and percent of litters and CERF status for sire and dam. The term outdated CERF refers to CERF done more than 12 months prior to the breeding. Not included in these charts are the cases where CERF was done after the breeding occurred; such evaluations, as mentioned previously, are useless in prevention of heritable eye conditions. Year after year, the most commonly reported heritable eye condition in Bearded Collies is cataracts. This information comes from research reports by CERF from ACVO (American College of Veterinary Ophthalmologists) evaluations on each and every dog that is examined. While not all owners pay the fee to record their dog's status with CERF (and thereby obtaining a certificate) – and certificates are only issued for dogs with eyes free of heritable disorders – all data are sent to CERF and included in the annual report on eye problems in each breed.









You decide if you think these figures are acceptable for the breed. If not, become an activist and play a part in learning how to bring about change and improve the situation. If you are satisfied with the status quo, well then – remain complacent.