Breed Dilemmas and Extinction

“All those who wander are not necessarily lost”

By

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No breed seems to be free of dilemmas. For some it begins with the conflicts that continue among club members or the breeders’ who question the carrier status of stud dogs or the offspring they produce. Others believe it is the lack of quality observed in the winners, the growing number of carriers or the increase in dreaded diseases. Whatever it is, when breeders gather, the dilemmas for their breed usually dominate their conversations. But regardless of the topic, the solutions rest with the breeders and the elected officers of their clubs. They have the power to change and create their breed’s reality. A look at the big picture suggests that it all boils down to whether they will choose to continue on a path of trial and error or whether they are willing to try and make a difference.

Over the past three decades the sport of dogs has steadily increased in popularity. More than 15,000 events are held annually that involve 1.5 million exhibitors in addition to those who attend as spectators. In such an environment it is not easy to see why so many breeds are entering a critical

period in their destiny. The facts show that with this kind of growth there also comes an increase in the number of inexperienced breeders and a continued rise in health and conformation problems.

Analyses of many breed problems suggest that some of their most important problems are not so obvious. For some, it is the lack of quality in the dogs being bred. For others, it is the lack of skills needed to manage and exhibit what they own. But in general, the lack of training in the fundamentals of how to breed and manage what they keep continues to persist. What breeders keep should be given more attention when you consider that 60% of the top dogs in most breeds are not owned by their breeders. This suggests a lack in the skills necessary to recognize the better pups when they occur.

When all of these problems are combined they produce what many believe are the primary reasons for the reduction in breed quality and the decline in the size of many gene pools. All of this is happening despite the advances being made in technology and the improvements that have occurred in health testing and nutrition.

This lack of progress can be traced to a fundamental

problem. Surprising as it may be, it is not the lack of information or willingness to act that hinders progress. It is the persistence of outdated beliefs and attitudes that are based on folklore and myth. According to Padgett (1991), most breeders continue to believe that the dogs they own are genetically normal. This, he says, is because of the investment of time and money they have in their stock that they do not wish to see diminished. For these reasons most usually avoid talking about problems when they occur. Therefore, when the opportunity occurs to notice one or more trends in their kennel, they keep the results a secret. In the meantime the knowledgeable breeders work alone and their isolation makes little or no impact on their breed outside of their own kennel. This scenario seems to produce one of the greatest dilemmas facing most breeders and their clubs.

A closer look at this situation suggests that most breed problems rests on the shoulders of the bitch owners because they control the matings, produce the pups and sell them to their new owners. In short, they have both the power and the influence to determine quality or the lack there of. They hold not only the keys to the gene pool but also to the future of their breed.

What makes their problem solving so difficult begins with

what they believe to be true. Because there is a prevailing attitude that most dogs are genetically normal, when an abnormal pup occurs or a recessive gene expresses itself, most avoid talking about it. Those who talk about their problems are considered to have dogs that are less than average or perhaps abnormal. Because these attitudes prevail and because they are passed along from one breeder to the next, it is easy to see why problems and many diseases have not been eliminated. For example, it has been reported (Padgett) that the average number of defects in most breeds may be fourteen, which has not seemed to concern many clubs but this statistic takes on more meaning when comparisons are made to specific breeds. For example, the German Shepherd Dog has at least 7 defects, while the Pekinese are known to have 14 and the Beagles 31, which is more than twice the average, but significantly less than the highest, which is the Rhodesian Ridgeback with 58. Other breeds with high numbers of defects are the Cocker Spaniels with 52 and the Bull Dogs with 44.

In this environment it is not surprising to find that the problems of most breeders and their clubs are not in reaching their goals but in establishing them. As mentioned earlier, the root of these problems can be found in the misguided belief that most dogs are without defective genes.

After years of this kind of thinking, the impact on many breeds has become predictable.

Since reliable estimates have not yet been developed for each breed, health histories and breeder behavior have become the next best alternatives. While individuals working alone can not solve breed problems, organizations such as the AKC in conjunction with National breed clubs (parent club) can develop programs that can make a difference. Using new technologies and ideas, stronger education programs can be developed. It is especially important that they reach the novice who continues to use outdated trial and error breeding methods. **For too many, the words "pedigree analysis" remains just a phrase.** Unless the novice gets help, breed problems will worsen and the number of carriers will continue to increase. As their frequency multiplies, more dogs will become inferior. Out of this scenario comes a breed's worst problem. One that first begins by repeating itself over and over until it prevails. It begins when breeders can be heard to say, "It's just another problem of the breed". This scenario, when repeated year after year, serves as a reliable signal that skill levels are dangerously low. For example, there are growing numbers of breeders who produce pups of such poor quality that they must sell them on limited registrations or on

spay/neuter contracts. Both actions send a signal to the buyers that the pup lacks quality. As larger numbers of breeders begin to sell pups this way, the number of registered dogs in their breed declines and their gene pools begin to shrink. This problem is becoming more widespread than previously thought. It will translate into the demise of several breeds. For example, in 2002 there were 38 breeds that registered fewer than 100 dogs each year for five consecutive years (1997 – 2002). As seen in Table 1, there were only 4 exceptions to this trend among these breeds. More importantly, there were 44 breeds that registered fewer than 100 litters each year for this same five-year period. This five-year downward trend for both dog and litter registrations points to another issue. It is called survival. The data suggests that for some breeds there is a possibility for extinction which could occur within the next ten years.

Table 1. AKC Dog Registrations (1997-2001)

2001 Rank	Breeds	2001	2000	1999	1998	1997
112	Salukis	84	79	80	63	67
113	Belgian Tervuren	84	84	78	89	106
114	Belgian Sheepdogs	83	80	80	85	101
115	Retrievers (Flat-Coated)	82	100	75	98	84
116	Petits Bassets Griffons Vendeens	75	83	72	100	92
117	Bedlington Terriers	66	54	57	56	57
118	Spaniels (Welsh Springer)	61	63	58	57	60

119	Wirehaired pointing Griffons	55	66	44	37	41
120	Briards	51	61	57	60	58
121	Spaniels (American Water)	49	45	57	62	68
122	Lowchen	49	44	37	24	35
123	Spaniels (Clumber)	47	60	43	51	46
124	Black and Tan Coonhounds	47	47	48	55	57
125	Anatolian Shepherds	42	48	49	41	45
126	Pulik	40	36	48	36	46
127	Polish Lowland Sheepdogs	40	38	28	0	0
128	Miniature Bull Terriers	40	42	49	42	44
129	Kuvaszok	35	48	49	59	84
130	Spinone Italiano	33	6			
131	Finnish Spitz	30	27	30	27	39
132	Scottish Deerhounds	28	28	27	27	33
133	Retrievers (Curly-Coated)	27	25	25	31	28
134	Komondorok	26	23	32	31	40
135	Canaan Dogs	26	25	20	18	11
136	Spaniels (Field)	25	28	28	36	29
137	Spaniels (Irish Water)	25	23	33	22	21
138	Greyhounds	25	30	24	32	29
139	Sealyham Terriers	24	18	21	17	28
140	Skye Terriers	24	23	25	38	31
141	Pharaoh Hounds	23	19	16	20	19
142	German Pinschers	23				
143	Spaniels (Sussex)	20	16	21	22	16
144	Dandie Dinmont Terriers	20	33	38	30	33
145	Ibizan Hounds	18	12	13	17	19
146	Plotts	18	35	30	8	0
147	Foxhounds (American)	18	14	14	15	13
148	Harriers	11	6	6	10	11
149	Otterhounds	8	7	2	4	9
150	Foxhounds (English)	7 200 1	8 2000	5 1999	7 1998	6 1997
	Total for all 150 breeds	461,863	506,727	527,023	555,964	564,1

The dilemma of declining registrations in a breed signals yet another symptom, which perhaps is an even greater problem, that being the decline of gene pool diversity. Twenty-three of the 38 breeds listed in Table 1 showed a steady decline in registrations and are candidates for a loss of gene pool diversity.

The AKC and its breed clubs collectively spend millions on health research aimed at the reduction of health problems and the carriers. In such an environment problems should be getting smaller not larger. Standing in the way however, seems to be four problems that complicate matters. First, the wide spread attitude that most dogs are genetically normal, which leads to the second, the tendency to avoid talking about problems when they occur. Third, the general lack of skills needed to breed the better dogs and the fourth, which is related to the first three, that most clubs have not established their goals and have no mechanism linking pedigrees to test results. These four scenarios have proven to be the best mechanism by which breeds hide, rather than solve their problems. The net effect is that their problems increase along with the carriers who persist at the expense of their breed.

Developing a mechanism that can expand the base of education,

coupled with the willingness to share information, is the challenge. Given today's technology such efforts are well within the grasp of the AKC and every parent club. The first step begins by establishing goals and agreeing on a list of problems to be addressed. The second involves the development of a strategic plan that includes finding better ways to use test results along with better methods for identifying carriers. One recommendation was offered in the 2002 AKC/DNA Committee Report. It suggests that AKC provide the link that bridges pedigree information with test results. The third step requires a mechanism that will motivate clubs and breeders. One approach has been to include incentives. Some of the most effective motivators have been titles, certifications and awards. All have proven to be effective ways to motivate people. The following includes some of the known ingredients that can help address these problems:

1. Open each program to all breeders
2. Offer titles, awards and other forms of recognition/incentives for those who achieve success
3. Develop continuing education programs that include:
    - mode of inheritance
    - breeding strategies
    - Pedigree analysis
    - Litter and puppy evaluation
4. Provide a mechanism that collects and distributes information about each problem
5. Establish a link between positive identification, test results and pedigrees.
6. Include website and email support
7. Provide camera-ready reports and articles regarding the status of each project with updates

and success stories:

- Newsletter Editors
- Web masters

No program is perfect and there is always room for improvement. Given today's advanced technologies, these steps are well within the grasp of those interested in solving breed problems. It is important to remember that information is power and that those who accumulate, study and organize it can surely reap its benefits.

References:

American Kennel Club, 2002 Board Committee Report on DNA, American kennel Club, 260 Madison Ave, and NY. NY.10060

Padgett, George A. Control of Canine Genetic Diseases, Howell House, New York, 1998.

Padgett, George, "Genetics I Introduction", 1991 Beagle Review, Darcroft Publishing, Wilmington, VT, Vol. 1, No. 1, Winter 1991, pg. 14-16

Teeling, Mary and Roethel, Cynthia, Editor, “Genetic Diseases, disease frequency and gene frequency of the Rhodesian Ridgeback”, a Health and Genetics Seminar presented by George A. Padgett, Michigan State University, Veterinary Medicine, 2001.

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