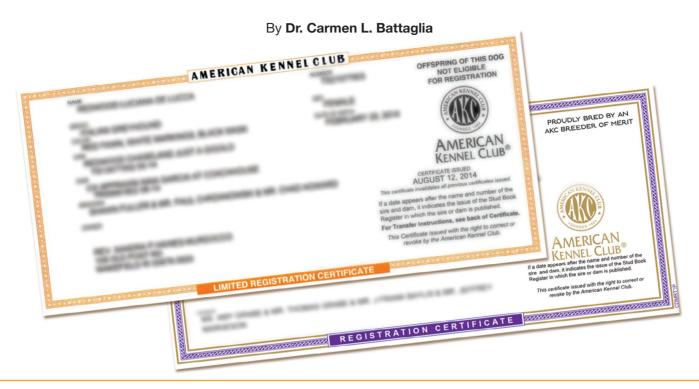
Limited Registrations

Its Uses and Interpretations as a Breeders Tool



t all began in 1884 when the American Kennel Club (AKC) was founded. From its beginning the AKC began to harness science and technology for the benefit of producing better purebred dogs. It wasn't long before the AKC became recognized as a leader in breed knowledge, health and training for all dogs as the advocate for responsible dog ownership and the dog sport. Over these many years certain events brought about changes. One involved a response to breeders who asked for a tool which was later called the Limited Registration (LR). The idea for such a tool was approved by the AKC Board in June of 1988 and referred to the delegate body for consideration. The idea for this tool was first noted when breeders asked AKC to create a tool that would address the registration of pups with disqualifications, serious faults and/or health problems. They needed a way to protect the gene pool of their breed.

The proposal for such this tool was presented by AKC staff to the delegates at the September, 1988 meeting. It was discussed at the December, 1988, and March, 1989 delegate meetings, and it was approved by a vote of the delegates at their meeting in June, 1989. The purpose of the LR tool was to provide a way for breeders to register pups but limit their breeding if they had disqualifications or other serious health problems or faults of conformation. The LR was intended to allow these pups to participate in companion, performance and other venues.

Since its approval in 1989, the number of pups registered on a LR has steadily increased. This was not expected given the advances in breeding practices, pedigree analysis and health testing. After three decades of advancements, one would expect the number of poor quality pups and those with health problems to decline. Based on these statistics it became obvious that an in-depth review of its uses was needed. This review began in 2018 with an analysis of the AKC data coupled with a series of interviews with breeders who used the LR tool. Over 100 breeders participated in the interview process. A summary of their responses shows the diversity of uses:

- Breeders said they were using the LR tool to control breedings.
- Breeders said they would charge more for fully registered pups.
- Breeders said they used the LR tool to reduce competition from other breeders who wanted to breed. Many reasons were given.
- Breeders were found to use the LR tool to control puppy buyers via contracts that require buyers to sign-off before the LR will be lifted.
- A small number of breeders used the LR to reduce the spread of health problems and faults in conformation.
- The number of LR that are revoked to full registration was found to be less than 3%.
- What is not known is the number of pups that are being sold on a LR that are not registered by their new owners. Some estimate it to be equal to the number actually registered.

The interviews confirmed that the LR tool is being used for purposes beyond those intended by the delegate body and the AKC Board. Some of the more common responses were:

- I limit my pups when the buyer tells me "we do not want to show."
- My breed requires a higher level of knowledge so I

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limit my pups to avoid poor breeding.

- I do not want novice people breeding my breed.
- I use the LR when I think the buyer is not worthy.
- I do not use the LR because my breed is becoming extinct.
- I use one price for LR and another for full registrations.
- I do not use LR because we should all be breeding good quality pets.
- I think breeders should encourage new owners who want to breed.

The Bell Curve was used to better understand more about the impact of LR's and how they are affecting breeds, the stud book and the diversity of breed populations. This tool projects the distribution of quality for individuals in a breed population. It shows the distribution of superior, average and below-average animals. In other words, the Bell Curve serves as a way to project the number of average, poor and superior specimens expected to occur in a breed population.

The Bell Curve shows the distribution of normal specimens in a population to be 68.27%. There are two tails to a Bell Curve.

Table 1 and 2 Lowest and Highest Entries by Breed

2019	AB Events with Entries	% of AB Events with Breed	% of AB Events without Breed	AB Events without Entries	
Chinook	9	0.6%	99.4%	1434	
Norrbottenspets	11	0.8%	99.2%	1432	
Norwegian Lundehund	20	1.4%	98.6%	1423	
Peruvian Inca Orchid	39	2.7%	97.3%	1404	
Dutch Shepherd	59	4.1%	95.9%	1384	
Portuguese Podengo	63	4.4%	95.6%	1380	
Lancashire Heeler	68	4.7%	95.3%	1375	
Teddy Roosevelt Terrier	70	4.9%	95.1%	1373	
Belgian Laekenois	77	5.3%	94.7%	1366	
Plott Hound	82	5.7%	94.3%	1361	
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Labrador Retriever	1423	98.6%	1.4%	20	
Rottweiler	1423	98.6%	1.4%	20	
Cavalier King Charles Spaniel	1427	98.9%	1.1%	16	
Whippet	1428	99.0%	1.0%	15	
Boxer	1429	99.0%	1.0%	14	
Poodle	1437	99.6%	0.4%	6	
Doberman Pinscher	1439	99.7%	0.3%	4	
Golden Retriever	1439	99.7%	0.3%	4	
Australian Shepherd	1440	99.8%	0.2%	3	
Dachshund	1441	99.9%	0.1%	2	

At one end are those that are above average and superior. At the other end are those that are below average and very poor. The two tails show what is expected if nothing intervenes to change the outcome. For example, if we randomly sampled 100 individuals in a breed, we would expect to see a normal distribution frequency for the traits that are variable, such as height, weight, size and health.

The Bell Curve shows that 4-6% of the pups produced would

be expected to be above average and superior in quality and that 4-6% would be expected to be below average and of very poor quality. Given these distributions, the LR data for 2008-2020 was studied.

Data for 2008 shows that 76,855 pups (4.5%) were placed on a LR which is consistent with Bell Curve expectations. However, by 2020, LR's had increased to 167,671 pups or 10.6%, which far exceeds the expectations of the Bell Curve. Only 508 were revoked that year. These statistics are troubling after three decades of advances in science and the monies spent by AKC, CHF and

other institutions to improve canine breeding and health. Examples of the advances used by breeders included: how to manage the carriers and control disease (Bell); formula breeding as a way to focus on the traits of a great sire (Brackett); how to increase what is known about the ancestors in order to Breed–Up and improve quality (Battaglia); how to make better selections of sires and dams to improve genetic diversity (Bell). Based on the science and the improvements, breeders can now breed by direction rather than by chance. When all of these factors are taken into consideration, one would expect the number of LR's to decline.

In an earlier study by Battaglia, 60 breeds were found to have more than 25% of their pups being placed on LR. In this follow-up study, 19 of the 60 breeds had registered more that 25% of their pups on a LR (Table 3 on next page). The consequences of eliminating pups from a gene pool included a loss of genetic diversity which was addressed by Dr. Jerry Bell who stated that in order for a breed to remain healthy it must grow and sustain gene pool diversity. Three approaches were suggested. The first involves the parent club and their breeders' willingness to grow, expand and keep their breed healthy. This can be measured by the number of litters and dogs registered, the number of breeders who use the breed standard and health initiatives, and the number of owners who enter dogs in shows. Bell also suggested that breeds need to establish priorities for their health initiatives, monitor the use of LR, and use health surveys that document the number and frequency of conditions affecting their breed. The second involves the parent club's efforts to build membership and educate new breeders with mentors. The third involves the impact on the sport which can be measured by the frequency of entries at dog shows.

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Row	Breed	BVG_NUM	Litters	Pups	Pups Registered	% Conversion Rate	Limited Reg.	% Limited	# Actually Bred	% Actually Bred	# Entered in Events	% Entered in Events
1	English Foxhounds	410	2	10	10	97.6	1	6.70%	0	3.3	5	48.8
2	American Hairless Terriers	231	2	14	4	78.6	0	9.10%	3	27.3	7	63.6
3	Bergamasco	841	4	26	11	43	3	64.50%	2	54.8	2	3.2
4	Harriers	412	4	14	1	1	5	1	3	7	45	
5	American Foxhounds	409	5	23	15	67.5		0.00%	1	10	12	84.3
6	CeskyTerriers	228	5	18	13	75.2	3	24.60%	4	28.3	7	54
7	Otterhounds	415	6	30	30	99.1	0	1.30%	1	3.8	19	60.7
8	NorwegianLundehunds	330	6	17	10	55.4		0.00%	1	5.8	3	39
9	SpanishWater Dogs	862	7	41	16	59.6	8	47.40%	3	34.8	4	36
10	SkyeTerriers	220	7	32	29	93	1	3.20%	2	7.9	18	61.1
11	Cirnechidell'Etna	440	8	45	14	95.6	2	14.00%	1	0	21	48.8
12	Chinooks	653	9	56	46	80	2	3.00%	3	7.3	7	14.2
13	FinnishLapphunds	848	11	48	42	87.2	15	37.50%	3	7.2	20	46.1
14	AmericanEnglish Coonhounds	425	11	86	30	35		0.00%	5	15.2	9	33.4
15	PyreneanShepherds	853	12	40	36	90.6	1	5.00%	3	6.7	26	70.3
16	PharaohHounds	421	13	69	52	73.7	13	29.20%	3	4.2	26	46.9
17	BergerPicards	856	13	51	11	66.7	3	29.40%	2	5.9	17	50
18	Glen of Imaal Terriers	229	13	67	58	85.5	22	34.50%	1	1.7	22	39.8
19	Spaniels(Sussex)	120	13	51	44	86	1	3.10%	4	9.9	27	61.5
20	WirehairedVizslas	141	14	81	40	77.2	14	34.30%	5	7.5	15	24.6
21	Retrievers(Curly- Coated)	105	14	83	67	81	10	15.30%	3	5.5	25	39
22	NorwegianBuhunds	838	15	72	53	74.5	8	14.40%	2	3.6	22	41.4
23	Canaan Dogs	840	16	61	48	78.8	9	17.80%	2	4.1	17	36.2
24	IbizanHounds	420	16	85	77	90.2	4	5.10%	4	5.1	58	75.8
25	Setters(Irish Red and White)	129	16	121	102	85.4	26	25.40%	5	5	39	38.1
26	ScottishDeerhounds	418	17	95	78	82.2	4	4.90%	4	5.7	50	63.7
27	Spaniels(Irish Water)	119	19	132	114	86.3	16	14.30%	4	3.2	41	35.8
28	FinnishSpitz	313	20	74	41	56.2	10	23.30%	6	13.8	16	37.8
29	Greyhounds	411	21	122	87	73	2	2.20%	4	4.4	50	57.9

Table 3Limited Registrations, Litters and Entries

Based on this review of the breeders who use the LR tool, it is clear that many are not using the tool for its intended purpose and the unintended consequences of their behaviors is producing a ripple effect that can be seen in a breed's genetic diversity, club membership and the dog sport. The entries of one and the absence of breeds at dog shows called "no shows" serves as two good examples. The ripple effect being produced can also be seen in the declining number of dogs required to earn points toward a major.

The data presented in *Tables 1 and 2* show how the factors mentioned when combined are impacting clubs, breeders, exhibitors and the conformation sport. The elimination of pups from gene pools is only one of the contributing factors. The combined effect of having no "Fun" matches and the growth of clusters are other factors contributing to the unwillingness of new exhibitors to attend dog shows. Breeds with the lowest and highest rates of entries at dog shows should be a concern to every All-Breed and Parent club interested in the future of the dog show sport. The number of breeds with entries of one or zero continue to increase and explains why new exhibitors are discouraged from entering dog shows. As these problems continue to grow, the ripple effect will be seen in the decline of parent club membership, participation of active breeders, loss of gene pool diversity and the sport.

Given the significant differences between the breeds with the lowest and highest entries, it is not difficult to understand why so many breeds have become a Low Entry breed. Also contributing to the decline in show entries is the absence of breeder education programs and the greying effect of clubs. Complicating an already complex issue is the common practice of neutering dogs and its negative effect on canine health (18-29). According to the American Pet Products Association's, 2019-2020 National

Table 3									
Limited Registrations, Litters and Entries cont.									

30	Spaniels(American Water)	112	21	141	99	70	13	12.50%	4	3.8	13	13.1
31	Dandie Dinmont Terriers	208	22	66	51	76.9	10	19.80%	5	9.9	25	50
32	Kuvaszok	617	23	111	82	74.7	5	6.40%	5	6.1	21	25.5
33	SealyhamTerriers	219	23	83	67	81.1	4	6.20%	8	13.6	29	43
34	Boerboels	659	24	164	51	52.4	12	11.90%	18	32.7	10	68
35	Komondorok	616	24	121	56	46.3	3	6.50%	9	15.3	12	20.1
36	EntlebucherMountain Dogs	859	25	135	77	58.9	32	39.90%	9	11	15	18.8
37	PolishLowland Sheepdogs	836	25	96	53	55.9	33	62.10%	5	8.9	12	22.3
38	SwedishVallhunds	844	25	114	85	74.9	25	29.40%	5	5.9	34	40
39	Beaucerons	846	28	185	110	58.5	42	38.30%	6	7.4	38	33.5
40	IcelandicSheepdogs	842	31	136	120	88	18	14.30%	9	8.4	43	36.3
41	PortuguesePodengo Pequenos	443	31	76	66	87.2	2	3.50%	15	22.8	41	61
42	Lowchen	317	32	88	73	84.1	23	30.70%	7	9.1	41	55.3
43	Plotts	423	33	204	67	32.7	0	0.50%	15	21.5	12	19.4
44	Pulik	821	33	149	90	60.2	10	11.20%	7	7.8	22	23.7
45	GermanPinschers	636	33	189	150	79.1	67	44.90%	9	5.9	47	31.2
46	Spaniels(Field)	118	34	166	135	81.5	46	34.00%	10	7.3	58	43.1
47	LagottiRomagnoli	134	35	201	42	62.7	21	50.80%	24	9.5	22	17.5
48	RedboneCoonhounds	430	37	254	89	36.3	10	10.90%	16	18.2	28	31.4
49	Salukis	417	39	195	179	91.6	5	2.80%	5	2.6	127	70.9
50	PetitsBassets Griffons Vendeens	422	39	169	107	63.3	37	34.40%	12	11	44	41.8
51	TreeingWalker Coonhounds	426	39	241	91	36.2	0	0.30%	9	10.1	38	42.3
52	BedlingtonTerriers	204	40	189	130	69	25	18.90%	11	8.6	52	39.7
53	Briards	808	41	268	169	63.1	44	26.10%	10	6	75	44.7
54	Spaniels(Clumber)	114	43	196	141	71.4	26	18.60%	13	9.9	79	56.9
55	Spaniels(Welsh Springer)	121	43	252	187	74.2	86	45.70%	11	5.7	63	33.5
56	TibetanMastiffs	640	44	268	168	62.5	32	19.00%	14	8.5	55	32.8
57	BelgianSheepdogs	803	47	277	224	80.7	51	23.00%	6	2.5	91	40.1
58	Pointers	101	48	289	215	74.2	15	6.90%	20	10.3	132	60.7
59	BluetickCoonhounds	424	52	439	133	29.9	17	12.10%	33	26.6	29	22.5
60	Affenpinschers	501	54	144	116	80.1	9	8.00%	22	20.2	53	46.1

Pet Owners survey, 78% of the dog-owning household neuter their pets.

Conclusion

Since the beginning of the LR program in 1989, the number of pups placed on a LR has steadily increased. By 2021, the estimate of pups lost through LR exceeds two million dogs. Thus, it is also fair to say that a large number of breeders are not using this tool for its intended purpose. Several published reports have detailed the problems related to the misuse of the LR tool and the impact it is having on the stud book and conformation sport.

In summary, we can conclude that the combined nature, size and scope of the problems reviewed will require a long-term commitment that will challenge most breeds and the AKC. Experts believe it could take years to change the direction and use of the LR as a breeder's tool and the other related problems affecting breeds, their genetic diversity, dog show entries and the dog sport. A good start would be to begin with the recommendations of Dr. Bell, and the need to grow breeder education programs.

About The Author

Carmen L. Battaglia holds a Ph.D. and Master's Degree from Florida State University. He is an author of many articles and several books, an AKC Director, judge and researcher. He is a well-known lecturer and leader in the promotion of breeding better dogs.

Dr. Battaglia is also a popular guest on TV and radio talk shows including several appearances on Animal Planet. His seminars on breeding better dogs, selecting sires and choosing puppies have been well-received by breed clubs. Those interested in learning more about his writings and seminars should visit the website http://www.breedingbetterdogs.com