



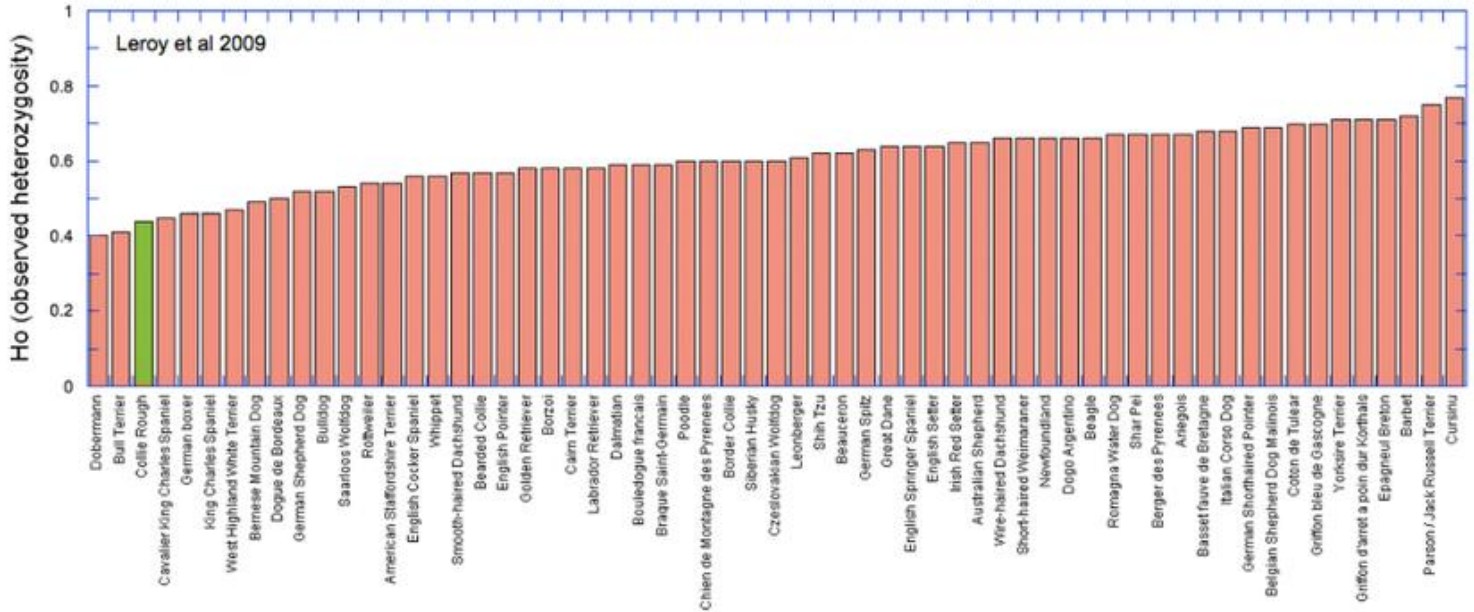
iCollie

We advocate. We care. We preserve.

Heterozygosity

Heterozygosity indicates how much diversity there is in the genetics of the breed. Low heterozygosity indicates low genetic diversity.

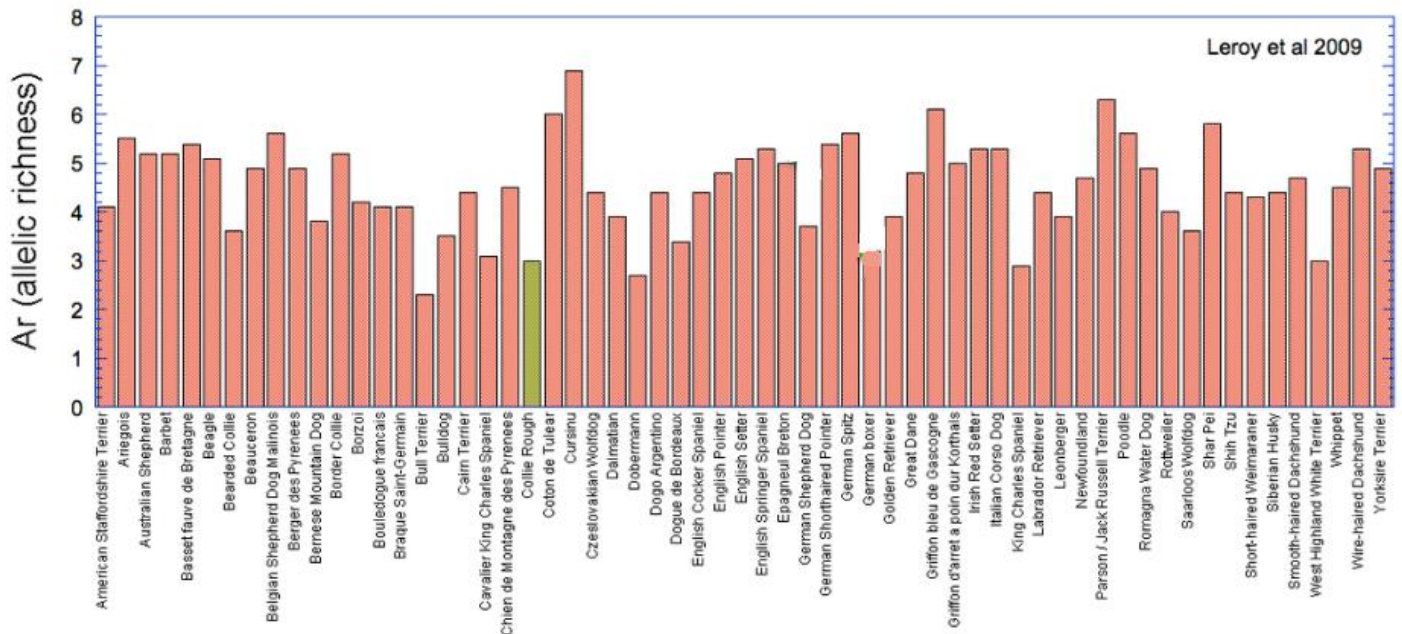
Leroy et. al. 2009



Allelic Richness

The lower this bar the less diversity in alleles (gene forms) there are. The higher the bar the more genetic diversity.

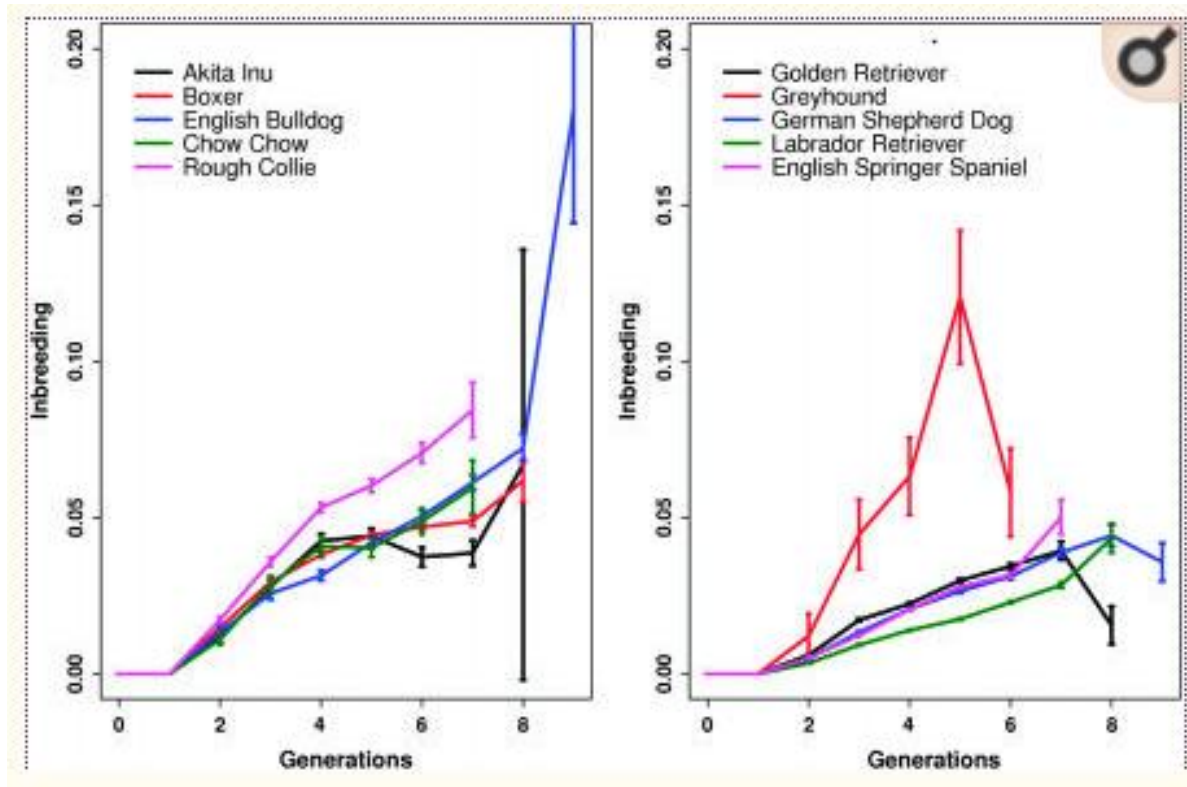
Leroy et. al. 2009



Pedigree Inbreeding Coefficient

A constant increase over generations is observed, indicating consistent predisposition to inbreeding over time in the breed.

Calboli et. al. 2008



Pedigree Based Inbreeding Values

A constant increase over generations is observed, indicating consistent predisposition to inbreeding over time in the breed.

Calboli et. al. 2008

Breed	Dogs in generations 6 and 7						
	N	Mean f	% > 0.1	Maximum f	N_e	Mean kinship	% survival 6 generations
Akita Inu	2,864	0.038	9.0	0.32	45	0.023	30
Boxer	44,521	0.048	16	0.50	45	0.017	11
English bulldog	12,396	0.057	18	0.41	48	0.038	17
Chow chow	1,747	0.051	19	0.38	50	0.028	6.2
Rough collie	4,650	0.073	29	0.38	33	0.020	2.9
Golden retriever	31,259	0.035	8.2	0.39	67	0.013	6.3
Greyhound	16	0.058	0	0.08	17	0.072	6.5
German shepherd dog	43,488	0.033	12	0.47	76	0.014	5.6
Labrador retriever	97,884	0.024	5.2	0.39	114	0.012	9.2
English springer spaniel	23,721	0.033	6.0	0.38	72	0.017	8.0