



What's wrong with the rib? A lesson in correct anatomy.

By Patricia Trotter

The thorough judge is the breeder's best friend. Although breeders study their own dogs and the dogs of their competitors, knowledgeable judges examine and evaluate thousands of dogs in a given year. Their hands-on, expert evaluations go under the coats to the skeleton itself. So, when judges comment on unfavorable trends, it is in the best interest of breeders to pay attention. Perhaps all the more so when those comments address something as basic as anatomy.

In the past this column has shared commentary by both judges and master breeders concerning the loss of functional front-end assemblies across the breeds. Because the correct forehand assembly seems to be very difficult to keep in a gene pool and all too easy to lose, judges and breeders have lamented the loss of correctness of shoulder and upper arm for a number of years. Now another important component of the skeleton is under scrutiny by some of our most respected dogmen and women: the anatomy of the chest and the relationship between the correct rib cage and loin.

The chest of course houses all the vital organs, and it must be constructed in the best form possible for the given breed. The ribs spring from the spinal column more dramatically in some breeds than in others (giving a more rounded contour). In other breeds the rib cage features flatter, deeper ribs, like those found in the aerodynamic construction of the sighthound. The usual dog rib cage tends to be oval shaped. The rib cage can be

measured in width, depth, and length to ascertain if maximum chest capacity is present for a particular breed. Such correctness is an absolute must for the athletic dog. (Furthermore, some experts have suggested that compromised rib cages could contribute to serious health problems.) When any of these three measurements of the rib cage are compromised, the dog is less able to endure exercise and stress.

The Problem with Loins

The increasing problem in many breeds is caused by a lack of length of rib cage and the excessive length of loin that usually accompanies it. In one recent discussion, experts shared this concern about sporting breeds, hounds, and working dogs - with emphasis on many pointing breeds (especially Weimaraners), retrievers, Cocker Spaniels, and Rottweilers. However, it seems few breeds have a monopoly on incorrect, long, and/or slack loins.

Consider the fact that the breed standards of even our long-bodied, short-legged achondroplastic breeds such as Dachshunds and Corgis call for short loins.

The loin is the coupling between the end of the rib cage and the beginning of the hindquarters. According to judges with many years of experience, the loin length on many breeds is getting far too long, while the rib cage seems to be less capacious than in the past. The longer loin (which is the unsupported back) compromises endurance and strength, and subjects the area to injury. If you have ever injured your own back, you

know it is most vulnerable beneath your rib cage where it has less support. And the same is true of the dog. Exactly what has caused this lengthening of the loin in many breeds is not clear.

Sometimes we hear breeders make the remark "I don't mind them a little longer, as the dogs move better." What exactly does this mean? Does the extra length of loin accommodate more anatomical deviations from the proper skeleton than the correct loin? In other words, does the excessive length mask other structural shortcomings? Certainly it lessens the degree of interference by the legs at the trot, which is the gait of choice in the ring. Are breeders unknowingly handicapping their dogs in one area by striving for more in another?

Experts agree that compromised rib cages unduly stress the housing capacity of the organs and long, slack loins compromise the dog at long, hard work. Keep in mind that a show ring is no test of a dog's stamina. Many non-athletic dogs and humans get around the ring well enough to satisfy adjudicators.

What Lies Beneath

Consider the breeds where the standards call for a square specimen. If the breeder is faced with using breeding stock that is slight off-square yet possessing a long, strong rib cage and a short loin - as opposed to a square individual with an inadequate rib cage accompanied by a long loin - which is the correct call? Although the individual appears square, the breeder has two serious anatomical deficiencies to face - an incorrect rib cage and an incorrect loin. How much has our sport's desire for ground-covering gait contributed to the lengthened loin? And how is this selection affecting the present and future anatomy of our dogs?

Although loin lengths vary from breed to breed most breeds would probably prefer the loin no longer than one-fourth of the dog's body or less. The Brittany

breed standard calls for coupling that is no longer than three to four fingers. Brittanys are living proof that selective breeding can achieve athletic animals with square proportions as well as correct balance of rib cage and loin.

Dogs working at the gallop such as sighthounds are using their somewhat longer loins for flexibility that contributes to stride length. The short loins on other breeds assist in lateral movement such as dodging. Dogs are built in differing configurations to enhance working ability for different job descriptions. We certainly don't expect them to all have the exact same physique. Yet we must always keep in mind that the anatomy we do not see makes the conformation that we do see possible.

Because the skeleton is the foundation of the dog, it must be given the attention something so integral to the dog's well-being deserves. The role of the discerning judge is to advise breeders when the breed is straying from its desired correctness. Compromised rib cages and overly long loins are anatomical problems the breeders must address, just as they must continue to seek correctly angled front and rear assemblies.

The breeding of quality purebred dogs is a delicate merging of art and science that sometimes finds itself at odds with Mother Nature. Yet we must remember that Mother Nature was the original breeder who brought us the foundations of today's beloved breeds.

By combining the wisdom of the past with the advice and vigilance of world-class judges, we will preserve our breeds for the future. Breeders, let's not miss the forest for the trees.

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