## What's Under All That Pretty Hair?

Second in the series exploring breed type Copyright 2002 by Kathy Lorentzen, all rights reserved

The outline of the English Springer Spaniel is determined by the size and placement of bones and muscles that create a picture of balance and proportion. To follow the adage that form follows function, it is important to remember that a specific build will lead to superior performance.

Our standard calls for a dog built for endurance, agility and "reasonable" speed. Springers were created for the purpose of working over rough ground, sometimes in heavy cover, for a considerable amount of time. Thus, the emphasis is on "endurance" rather than on "speed". Dogs built for endurance require some specific body properties in order to best fulfill their job description: balanced, usable angulation fore and aft; proper length and strength of neck; a strong yet somewhat flexible back (often called a "working back" in Sporting Dog circles); a capacious ribcage; good length of leg and strong, firm musculature are all important considerations for a working Spaniel.

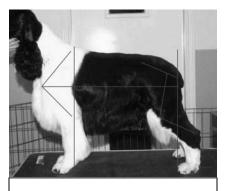


Figure 1. Shelby in show trim, two years old.

For this discussion on proportion, balance and housedog "Shelby Lynn" substance, my volunteered to be the model. Figure 1 shows Shelby at two years of age, in full coat and a reasonable show trim, standing naturally without being "cranked". Figure 2 finds our model three years older, three or four pounds heavier, shaved with a #7 blade, and back on that same table, again standing naturally. She asks forgiveness for the slight roll of skin over her shoulders in Figure 2. It's a function of those extra pounds. Figure 3, the skeleton, represents "ideal", though we know

that ideal doesn't exist in real life.

We are going to use Shelby as our example for several reasons. One is that she was the only Springer I could get pictures of both shaved and coated. More importantly, she has some virtues that can be hard to come by, and she also has slightly more front angulation than rear angulation. This is something that is rarely seen in the breed today, yet it is accepted in the breed standard as correct.



(Quote: "For functional efficiency, the

Figure 2. Shelby, five years old, shaved with a #7 blade.

## angulation of the hindquarter is never greater than that of the forequarter, and not appreciably less").

Let's start with proportion and substance. Shelby is correctly "slightly longer than tall" when measured from withers to ground and point of shoulder to point of buttocks. She also has the proper length of leg for an endurance trotting specialist-the distance from her elbow to the ground is approximately equal to the distance from her elbow to her withers. (Her elbow is slightly above her chest at its deepest point, easily seen in Figure 2, not as easy to discern in Figure 1. On the coated photograph, you might wrongly assume that the elbow is at the juncture where the two colors join, which would make her too leggy. Or, you might assume that the elbow is lower than it actually is, due to the tuft of hair on the back of her leg. In actuality, it is halfway between those two points). Although not specifically detailed in the standard, it is widely accepted that leg length that is half the total height is correct for a normal legged trotting dog. (As opposed to a galloping dog, which has legs longer than half its height). The combination of correct height to length proportion and proper length of leg gives the Springer his compact, upstanding appearance. He is the largest and leggiest of the land Spaniels, and should never appear long, low or squatty.

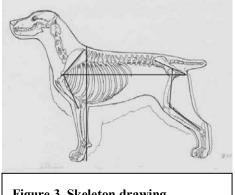


Figure 3. Skeleton drawing representing ideal.

Shelby is precisely nineteen inches tall. Because of her outstanding quality of bone, rib and musculature, when in correct weight she tips the scales at right about forty pounds. Her true bone and substance can be clearly seen in both Figure 2 and Figure 4. Her legs have been shaved with the #7 blade, so what you see is really bone, not hair. The bone in her front legs continues all the way to her foot without taper, as is called for in the standard ("Forelegs are straight with the same degree of size continuing to the foot").

Her fore chest and ribcage are capacious without being barrel shaped. This spring and depth of rib are absolutely necessary for an endurance dog. Without it, heart and lungs have no room to expand when the dog is working, and the result is a dog that runs out of steam in a hurry. This body style also helps the dog in the water, creating buoyancy. Some exhibitors claim a preference for a much flatter ribbed, more refined animal on the basis that a dog of this sort presents a more "elegant" picture. But our standard doesn't use the word "elegant" in its description of this breed. Instead, it uses words like "*legs strong and muscular", "power", "well-knit and sturdy with good bone"* and *"combining beauty and utility".* This is a breed that "picks up heavy" when they are correct in size and substance. This breed can and should be beautiful

without sacrificing these important type characteristics and also without ever appearing to be coarse or cloddy.

Our standard calls for a neck that is "moderately long". In keeping with the "free from exaggeration, nicely balanced in every part" statement, the neck should be in balance with the rest of the dog, and not strike the eye as being either long or short. For a dog to "be in balance" he must have much more than just balanced angulation fore and aft; his parts must all flow harmoniously into each other and no one part should draw attention from the whole. Necks should not be overly long or thin, as necks such as that lack the strength to carry heavy game, and indicate a general lack of overall musculature. Nor should they be short and stuffy, as that condition makes it difficult for the dog to easily reach to the ground to pick up game. In Figure 1, Shelby shows a correct length and arch of neck. Figure 3, easier to see because there is no ear in the way, shows the proper width and muscular appearance of the neck-long enough and properly arched, but in no way overdone or weak. The neck should blend smoothly and cleanly into the back line, and should never be upright, joining the body at a right angle. An upright neck invariably goes with poor shoulders.

Some people have been heard to say that our standard contains a contradiction on topline, but as the person who chaired the last standard revision process, I am here to tell you that is not the case. It says, "*The portion of the topline from withers to tail is firm and slopes very gently*", and also, "*The back is straight, strong and essentially level*". How can that be? Easy. This can be clearly seen in Figures 1, 2 and 3. The withers are slightly higher than the set on of the tail, yet the actual back (the section that begins <u>behind the withers and</u> *continues to the point where the croup begins,* is essentially level. Since the withers are the highest point over the shoulders, and the set of the tail follows a gently sloping croup, the ENTIRE topline from withers to tail slopes gently, but the backline remains level. Backlines that slope sharply indicate upright shoulders, and those that sag between withers and croup show incorrect structure and weakness.



Figure 4. Shaved Shelby from the front

Keep in mind that the spine is not a straight line. The curves of the spine, like the curves and arches of a suspension bridge, are designed for strength and support in combination with the flexibility that is required in an active animal. The spine gives the dog suppleness in action, allowing for the ability to leap and turn. Along these same lines, while the Springer should have a fairly short, broad loin, a loin that is too short restricts flexibility and hinders the dog from freedom of action. The cat has a much more flexible body and spine than the dog (because they have a relatively small, narrow ribcage and pelvis) and the horse has a body that is considerably more broad and stiff, lacking flexibility but very strong and weight bearing.

Angulation is our next topic of discussion. The standard calls for front angulation that, "when measured from the top of the withers to the point of the shoulder to the elbow...forms an angle of nearly 90 degrees". The lines drawn on Shelby in Figure 1 correspond to these external points of measurement, and from those lines, she appears to have forequarter angulation of nearly 90 degrees. The lines drawn on the skeleton in Figure 3 are drawn through the center of the actual joints, and represent Shelby's true, functional angulation, which is closer to 110 degrees. In a dog of normal leg length, such as the Springer, it is not possible (nor necessary) to achieve a true 45-degree angle of the scapula in the standing dog. Allowing for the fact that the scapula swings forward and backward on the rib cage, as if on a pivot near the top end, during motion, the blade may at times assume a 45-degree angle on the forward reach. The standard also says "when measured from the top of the withers to the point of the shoulder to the elbow, the shoulder blade and upper arm are of apparent equal length". From Figure 1, you can see that these visual points of measurement give an effect of equal lengths, but in Figure 3 the actual length of the bones is shown to be different, with the humerus (upper arm) actually longer than the scapula. A properly fitted front has elbows that lie back along, and closely set to, the ribcage (clearly seen on Shelby in Figures 2 and 4), and when a line is dropped from the withers through the elbow to the ground (as in Figures 1 and 3) there is a lot of dog in front of this line. Dogs that stand with their elbows forward ("under their ears") and/or away from their ribs have poorly constructed front assemblies that put stress on the body's support mechanism (muscles, tendons and ligaments), since the support is then farther away from the center of gravity.

Now let's look at Shelby's hindquarter angulation. The lines drawn on Figure 1 represent the external visual points of measurement from hip to knee to hock. The lines drawn on the skeleton in Figure 3 represent the actual angulation through the center of the joints. Externally, Shelby appears to have angulation at both the juncture of the pelvis and the femur, and the juncture of the femur and the tibia, of nearly 90 degrees (but not quite, since she actually is a bit straight behind, and slightly lacking in length of those bones). Again, the lines drawn through the actual center of the joints in Figure 3 represent the functional angulation, which is considerably less than that shown by the visual reference points. Also note in Figure 1 that a line dropped vertically from Shelby's seat bone falls just in front of her toes, again showing that she correctly stands with her support near her center of gravity.

While it is preferable to have both angulation and musculature that matches on both ends, it is far more desirable to have slightly less angulation of the hindquarter than the front, as opposed to the opposite situation (which unfortunately is often seen in our breed today). The front of a dog carries 65 percent or more of its weight, plus whatever is being carried in the mouth. It is able to take over much of the propelling ability as well as the function of support, as anyone who has ever seen a paraplegic dog with its hindquarters in a wheeled cart will tell you.

So, what does all of this mean? I can tell you exactly what it means to Shelby. My husband, John, is a marathon runner. Shelby has been his training partner for the past four years. Because of her capacity for endurance-which encompasses her moderate, basically balanced angulation; her capacious ribcage; her strong, flexible working back; her correct length of leg and her outstanding muscular development, Shelby is an exceptional athlete. She routinely goes eight miles at a stretch with John, leveled out in a long trot, never breaking gait and never tiring. When she trots, Shelby puts her head forward (for balance) and keeps her feet close

to the ground through all phases of her stride (to conserve energy). She covers a maximum amount of ground with a minimum amount of effort-exactly the



Figure 5. Leaping into the pool-off the diving board!

way an "endurance dog" should. John is incredibly impressed with both her physical abilities and her mental attitude-Shelby lives for her run, totally focuses on it, and comes back not exhausted, but refreshed and exhilarated. They typically run early in the morning, and in the summer when the pool is open, they jump in the pool together (see Figure 5!) to cool off. Shelby is also the most efficient swimmer I have ever seen; she swims exactly the way she trots, with a long, full stride, her head just above the water line and her body level. She never splashes water and her hindquarter never sinks. She covers ground in the water just like she does on land, and she leaves our not-as-well-built Golden Retriever in her dust on a regular basis.

While some might argue that Shelby lives "the easy life", she nevertheless demonstrates what it takes for a Springer to really represent the requirements of the breed standard. She does her endurance work on the road, not in a field full of birds (though she regularly and enthusiastically puts up flocks of wild Turkeys that venture into our yard, and sends the local rabbits diving for their holes with great abandon). She exhibits her agility and swimming ability leaping into and smoothly swimming across the pool (carrying a bumper instead of a duck), not

negotiating cattails and swimming through murky ponds. But the qualities that allow her to excel in her endeavors are the exact same qualities that allow this breed to excel in hunting, obedience and agility competition and work as service dogs. The standard was written to describe the dog that could best do its job, with a minimum amount of effort, and breeders and judges must strive to adhere to those requirements to keep this breed true to its origins.

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