

## The Front Assembly – Part II

August 1, 2012 by AKC Gazette Breed Columnist • Categories: Breed Columns

The first Norwich Terrier came to this country with Robert E. Strawbridge in 1915. As depicted in his portrait “Willum Jones,” by George F. Morris, this founding father of Norwichdom was rather long-legged, with cropped ears and a white-tipped tail. Yet when the first standard was written in 1932, the ideal Norwich stood on legs “short, powerful, as straight as consistent with the short legs at which we aim.” The Norwich Standards Committee had changed the game—or at least, tried to clarify the game.

Both here and in the U.K., the Norwich’s legs are still described in the standard as “Short, powerful ... as straight as is consistent with a digging terrier.” Short is a very relative word, however. What was the thinking of the framers who wrote the standard? “Short” in comparison to what? To an Airedale? To a Kerry Blue?

There are long-legged terriers and short-legged terriers. The latter could be grouped this way: Cairns, Westies, Norwich, Norfolk, Aussies, Dandie Dinmonts, Sealyham, Skye, Glen of Imaals, and Scotties. Thus “short” refers to a rather broad group classification. The Norwich Terrier’s leg is not then necessarily short in relation to the body. The Norwich should appear square and be at the same time short-backed – height and length measured from the withers, approximately the same.

Does it follow then that Norwich Terriers and other “short-legged” terrier breeds might be considered chondrodysplastic dwarves, like the Corgi? The surprising answer is yes! A study conducted by the Cancer Genetics Branch of the National Human Genome Research Institute, NIH, has confirmed this. Norwich carry the genetic code for dwarfism along with Cairns, Glens, PBGVs, Scotties, and Westies, among many other shortlegged breeds.

NIH scientist Dr. Heidi Parker notes, “The Norwich was not among the first breeds that we chose as dwarfs for the study because they don’t completely fit the criteria. It was only after the new [fgf4] retrogene was identified in the obvious breeds like Dachshunds ... Corgis and such that we looked for it in 68 different breeds with a wide range of sizes and shapes. We found the retrogene in all of the short-legged terrier breeds that we tested.”

What is chondrodysplasia? Chondro means “cartilage.” The term refers to any growth-plate disturbance resulting in canine dwarfism. Dwarfism almost automatically comes with bowed legs like the Dachshund or Corgi. Since our standard tells us the legs must be as “straight” as possible, we have been going against the genetic program. Years of selection for a straighter leg has been to the benefit of our breeds, which have what is called a “nonpathologic” form of chondrodysplasia. But the selection for short-leggedness can well impair movement.

Lesley Crawley notes: “ Norwich were always bred to be virtually the smallest of the terriers in order to be able to do their work in their home county of Norfolk. Here they had to be small enough to get down the narrowest of land drains in order to seek out vermin that destroyed and consumed farmers’ crops.”

The shorter leg facilitated the crouching and crawling necessary to going-to-ground. Is a shorter upper arm (humerus) therefore correct in Norwich? This common structural fault, because that is what it is considered in most breeds, can result in less reach when moving.

Robert Cole writes in *An Eye For a Dog*, regarding Fox Terriers (also a “digging terrier”):

“The Fox Terrier’s upper arm differs from the norm in that it is both shorter and has a steeper angle. This shortness and steepness of the upper arm positions the foreleg forward on the body and reduces the degree of forechest, changes the location of the elbow and forces the front pastern to position vertical so that the front foot is more under the center of forequarter support. This shortening and steepening of the upper arm permits the arc of the elbow to move forward and back above the brisket line, a distinct advantage when the dog goes to ground to bolt the fox.”

But many would disagree that this thinking applies to Norwich. After all, our dogs do not spend much time in drainpipes, and they were bred to be ratters as well as fox-bolters.

M. Christine Zink, DVM, Ph.D., DACVP, DACVSMR, says:

“While the Norwich is a terrier, it has to be able to move around most efficiently in life. Giving it a short upper arm that might benefit digging, though I am not convinced it does while penalizing it for everyday life, is not appropriate. Much of a Norwich’s time ... is spent in pursuit, not just in digging. ... further, I am not convinced that a short upper arm helps digging, because dogs with shorter upper arms have reduced muscle.”

Crawley agrees. Movement trumps a short upper arm. “The better the conformation all through the dog, the less effort is used to get from A to B, and the fitter the dog will be.” She also notes, however, that trends in breed type can wax and wane, and that where one judge may put up a more limited mover because he fits their ideal of type and outline, another will demand a better, more efficient mover.

Homework: View a Norwich exhibit’s side-gait. Look at his topline. Now look at leg-length to see how much space there is between the body and the ground. How much daylight do you see? Is it less than 50 percent? More than 50 percent? What should it

be?

Unfortunately space does not permit a discussion of the correct degree of angle in shoulder layback and in the upper arm ... or the answer to this 50-percent question. Keep your eyes peeled until next time!

— Leandra Little, AKC Gazette Breed Columnist · Weehawken NJ · llittle9@earthlink.net

© AKC Gazette, August 2012 · Norwich Terrier Breed Column · Reprinted with permission.