

SHOULD A SIGHTHOUND'S FRONT TOE IN, OUT, OR BE DEAD AHEAD?

By George Bell

Every Sighthound front fits into one of three categories when the dog is standing at rest. Two of these categories, toe in and toe out, have degrees, and the third, dead ahead, is static. Of the nine AKC sighthound breeds, five standards do not specify anything with regard to the toeing issue: Borzoi, Ibizan hound, Whippets, Scottish Deerhounds, and Salukis. Four breed standards specify that the feet should turn neither in nor out: Afghan Hounds, Greyhounds, Pharaoh Hounds, and Irish Wolfhounds. I'm certainly not an advocate of challenging any breed standard, and I'm a firm believer in leaving the standards as they are without changing a single word.



Lyle Gillette and Winafred Lucas coursing in Merced in the mid 60's. Both were instrumental in establishing organized open-field coursing in California.

A little background in the beginning: My Salukis were selected from AKC show champion stock that excelled in the field and were tested on live game. In the 60's, thanks to Winafred Lucas (Srinagar Salukis), her show Salukis were coursed in Merced, California. My Saluki foundation stock was selected from a Srinagar bitch owned by Dan and Laura Belkin named Ch. Srinagar Shavar Shahin. She was to be bred to a top coursing Saluki in the 1969/70 season. The

Belkins were taking 15 months off traveling to coursing meetings in Europe and the UK. A committee of coursing people was chosen to select the sire of the litter. Before the committee made its selection, I offered to take two pups if the sire was Srinagar Cirrus al Talat. The committee agreed with my choice, and the litter was born in March of 1971. The Alexanders generously allowed me the first two picks of the litter. Those two Saluki pups, a brother and sister named Lobo and Vida (Bayt Shahin Lobo a Bel S'mbran and Bayt Shahin Vida a Bel S'mbran) were bred right, and to this day are behind the seven all-time top record breaking Best in Show (BIS) Salukis of all time in the United States.

Vida is also behind many of the top coursing Salukis of all-time as well. It must have been beginner's luck, as my foundation stock back then were selected primarily for open field coursing.



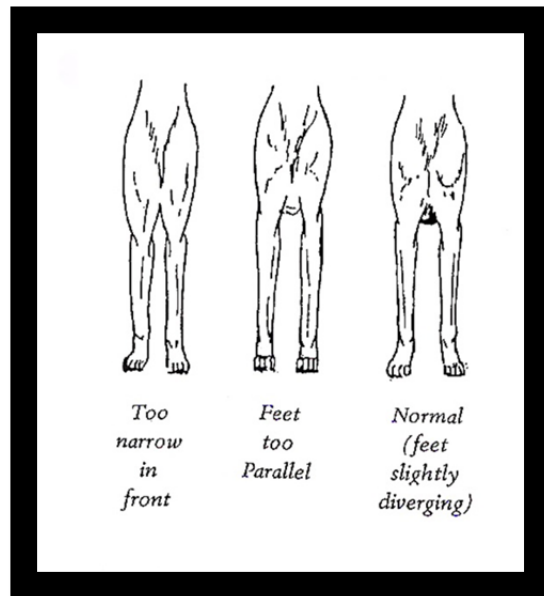
The 1971 Cirrus – Shahin litter. From left to right: Dan Belkin with Ch. Srinagar Shavar Shahin, Marian Alexander with Bayt Shahin Fleur, George Bell (author) with Bayt Shahin Vida a Bel S'mBran, Sally Bell with Bayt Shahin Lobo a Bel S'mBran, and Charles Alexander with Ch. Srinagar Cirrus al Talat.

The coursing season lasts only about three and one-half cold months of the year (November, December, January, and part of February), and so during the other eight and one-half months, we began our show pursuits. Sally had shown and bred Irish Water Spaniels and Yellow Labs and also competed with them in retrieving trials. I had never been in the ring and thought it was odd that the dogs were evaluated while prancing around inside. I was asked by the owner of a Ch. Saluki to take it in the ring for my first time at a Seattle Kennel Club show. I was up against Frank Sabella and the famous Saluki bitch, Kitten, owned by Cynthia Woods of Santa Barbara fame. Neither Frank nor I won the breed that day, but it was a memorable first time in the ring for me.

At another of the first early shows for me in the early 1970's, we had entered two male Salukis in the open class of four dogs. Charles Alexander owned one of the males, Cirrus, (the male selected to sire the previously-mentioned litter). Our dogs placed 3rd and 4th, and when the all-round judge had a break, I politely asked him if he could tell me why

the two dogs placed as they did. He asked to have a look at them, and as Sally was outside the ring with the two dogs, I motioned for the reluctant Sally to bring them into the ring. Here, the two top coursing Salukis in Merced, California, in open field coursing stood at rest in front of the judge. Looking at the dogs, the judge began by telling us, “This is a coursing breed, you know, and your two dogs toe out in front, and this shows a weakness in the front, as they should have a straight column of bones.” Sally thanked the judge for his view and we left the ring in a quandary, as the Bedouin have always exalted a toed-out front.

Looking back, I’m profoundly grateful and give full credit to the judge for telling me the truth as he saw it. Could it be our dogs were penalized for a virtue? There are thousands of years of historical data from the developers of the breed in the mid-east that a Saluki should toe out in front! This is for the ability to perform acute directional changes when pursuing Hares or Gazelle. I refer to the bible on Salukis by Hope and David Waters, “The Saluki in History, Art and Sport,” copyright 1969. A later revised edition has a drawing depicting the three fronts of Saluki, and the Waters have given me permission many times to reproduce the drawings for judges’ seminars and articles.



At seminars, we were constantly educating AKC judges on Saluki standards, and the more I studied the standard and function over the last 40+ years, the more I discovered why a coursing sighthound should toe out in front at rest, and this is for turning. It was at one of these seminars that the then president of the AKC stopped in at our program on Salukis at a time when our presentation included that the Saluki should, in fact, toe out, but our standard is silent in this regard. The AKC official asked: “Why then can you say they should toe out?” I replied, “This accepted knowledge is a foregone conclusion by the tribes that developed the breed over thousands of years in their countries of origin. Those who imported the breed wrote the standard, and again it was a committee. When they came to a controversial point, such as how the Saluki should trot in profile gait, or if their fronts should toe out, and they couldn’t come to an agreement, they remained silent on the subject. At the time I didn’t have visual proof, but by then, I knew what I was looking for, and I was determined to produce the evidence. What I needed was definitive photographic proof in still action of a hound toeing out in the turn.

To this end, it took years of trial and error attempting to get a clear picture of the foot plant in a directional change. Finally, we achieved our goal with a crew of five people to record the action on wet beach sand with a hound following a lure being towed by a van. The video camera was mounted on a tripod, and the operator shot the footage of the running dog out the back of a van while the dog barreled along the wet beach. Our set-up

wasn't a professional endeavor, but it captured the images we needed. Each of the 30 frames per second of video can produce a still image. We finally had the business end proof in four frames of still-action photography of how dogs execute a turn at high speed in less than 1/8th of a second. A Saluki can execute over three strides per second of the double suspension gallop, and each stride covers about 16 feet in distance. To understand the four frames and what is happening with the limbs of the hound does take some explanation, and this is in a side bar at the end of this article.

With regard to the toeing out issue, another interesting anecdote came from a current living all-rounder judge who was judging BIS at a very large California show in the late 1990's. He loved the Saluki in the BIS lineup who had the crowd cheering wildly, but the judge chose another in the lineup for best. That evening after the show, we bumped into the judge, and Sally congratulated him on the fine lineup for best. He recognized us from Salukis and said, "You know I loved that white Saluki bitch, but the front when she came back and stopped was unforgivable." Sally explained, in so many words, that that front is desired in the breed. The next day the judge asked around to folks whom he knew had Salukis if this toed-out front was acceptable in the breed, and they confirmed that this is exactly what you want. A few years later, toward the end of her show career, this same Saluki walked into the hound group at the Westminster Kennel Club show, and this same judge was judging the hound group. That white Saluki bitch brought down the house at the garden and won the group and was rewarded this time for a virtue. She damned nearly won the show as well.

I will never forget the prayer that the late Quentin LaHam used to begin each of his seminars. It went something like this:

"Dog Show Prayer"

Now I lay me down to sleep,
I pray for a show dog that is worthy of his keep.
One of whom it shall be said,
Has front feet that point dead ahead.
And please Lord hear my plea,
Give unto him great bend of knee.
I ask these things not just for myself,
Although I want the trophies upon my shelf,
But for the judges so worthy of pity,
That they may think he is ever so pretty.

Amen.

This tongue-in-cheek prayer was used to lampoon the judges in examples as previously stated. Most judges believe that a straight column of bones in a stack is the strongest front. Even the field people are a little embarrassed when I tell them that I like the slightly toed-out front on their dog. It works in the field and is sometimes penalized in the ring. The outside front limb in a directional change is what accepts the real stress in

the turn and is what changes the forward momentum of the dog and produces the turn. The column of bones of the outside front limb, from the tip of all four toes up through the top of the shoulders, needs to be straight in a directional change. Dogs don't need the straight column of bones while running in a straight line; dogs need the strong column of bones at the time of maximum stress to the outside front limb while changing direction. If the dog cannot correctly plant this foot in a toed-out position, the dog can incur injuries (broken or dislocated bones) to toes, pastern, or any weakness in this column of bones in a hard turn. By far one of the worst faults in a coursing dog is a "toed-in" front.

The joint capsules in the toes are at extreme stress as the dog navigates the turn. What most folks don't

realize is the outside limb leads the stride all the way through the corner. If the dog is turning to the left, the right front leg must lead the stride from the extended position of the double-suspension gallop. If that outside limb doesn't lead the stride, the dog will be unable to turn!

Incorrect conformation can compromise the functional ability in the field. I judged a record entry of 38 Whippets at the Westminster Kennel Club show in 2003 and was seriously wondering after initially judging the entry if I would be able to find a decent specimen, as about half the males toed in to some degree in front. Happily, in the second half of the entry in bitches, the situation was rectified, as several bitches toed out to some



While this picture does not show the actual foot plant of a toed-out dog, it does show the dog leading the stride with the right front leg all the way through the turn.

degree, including the Best of Breed (BOB) winner and several Award of Merit (AOM) bitches. David Frei interviewed me for the TV audience and asked, “What does a judge look for when judging at the garden?” My BOB winner was on the table in front of us for the camera crew, and I mentioned her strong points, including her slightly toed-out front. Her owners were standing there and almost swallowed their gum, as here is this daft judge announcing to the world their precious baby toed- out in front. This was one of her early shows as a youngster, and she went on to finish the next couple of years as the top Whippet in the breed and probably took a couple of dozen BIS wins. After her show career, she participated in Lure Coursing events, and I’m told had a couple of Best in Field wins.

As mentioned before, there are three fronts, and the slightly toed-out front is barely perceptible, but is worth its weight in gold in the field. There is a set of complex dynamics for sighthounds to the toed-out front. Tripods give a camera lateral stability, and this is the same principal in the dog that has the ability to toe out in a turn. You will notice Mother Nature blesses all canines in the wild with the toed-out front at rest. I would fall over in a faint if I ever saw a Coyote or Wolf that toed in. The dead ahead front is accepted in the ring, but lately, the toed-in front is accepted by breeders and judges alike, as they haven’t a clue about function and why toeing in does or does not work. For further explanation of how the toed-out front assists the dog in the execution of directional change, the photo sequence below shows exactly what those dynamics are in each 1/30th of a second.

All sighthounds, Cheetahs, and Hares, (speed merchants) have the same footfall sequence to co-ordinate their four limbs in a turn while performing the double suspension gallop (DSG). There is a different footfall sequence between a left turn and a right turn. The Saluki below is executing a left turn. He can lead the stride with either his right front limb or his left front limb. But in order to perform the left turn he must lead the beginning stride with the right front limb:

right front, left front, left rear, right rear, and then back into the extended position of the DSG. This footfall sequence will continue until the turn is complete. The youngster has practiced this



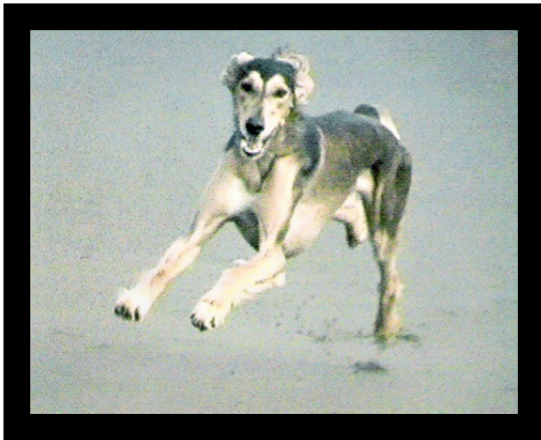
BOB Whippet bitch Ch. Tivo's Fallingwater at the 2003 Westminster Kennel Club show with noted strong point of a slightly toed-out front.



“Footfall sequence” of Jackrabbit (Hare) performing the double suspension gallop.

footfall sequence in the field until the time he matures. In a sense, the youngster has been programming his on-board computer by coordinating his limbs to perform the directional change. The sequence is now automatic, and he no longer needs to think about footfall sequence. He can lead the stride with either his left front or his right front. If the Saluki intends to turn left, the footfall sequence pictured below is as follows: right front, left front, left rear, right rear, and then back into the extended position of the DSG. If he does not perform the correct sequence, he cannot turn.

Digital video on how the sighthound performs a directional change:



#1 This male saluki actually toes out to a great degree standing at rest, but you would never know it by the way he extends his paws straight out in front of him to extend the length of stride in the DSG. Each half-inch of stride length counts as distance when you are running at three strides per second. I like to describe the Double Suspension Gallop (DSG) as the dog uses his four limbs as spokes of a cartwheel striking the running surface one-at-a-time propelling him along. He's running on wet beach sand, and the video camera is

mounted in a van that is towing the lure. He seems to run with a straight front, but can easily toe out in the turn, because toeing out is a natural position for him. He's in the extended position of the double suspension gallop and is deciding to see if the lure will turn. Notice his front paws are extended straight out in front of him. He can begin the stride with either front limb and begin his body lean. His eyes are fixed on the lure, and it is at this point he, within 100th of a second, is deciding if he will begin the stride with his left or right front limb. If he begins the stride with the wrong front limb, which is known as wrong-footing, he will need to return all the way back to the extended position of the DSG and begin again with the correct lead.



#2 Yes, the lure has turned to his left or our right. He correctly begins the stride with his right front (outside) limb and kicks both front legs to the outside to begin the body lean, much as you would lean over on a motorcycle. To make a directional change to his left, the stride sequence is as follows: right front, left front, left rear, right rear, and then back into the extended position of the DSG. If the dog does not follow this footfall sequence, he will be unable to negotiate the turn. If he is unable to turn

because he began the stride with the wrong foot, he must begin again from the extended position of the DSG. You have probably witnessed a sighthound at a lure course event that seems to continue running in a straight line after the lure has turned. This dog has been wrong-footed in his footfall sequence and does not yet have his on-board computer reprogrammed.



#3 He plants his outside limb, with the four toes pointed out, directly into the resistance, so as to distribute the stress evenly to all four toes. If he had planted the foot straight ahead, the stress would be on the outside toe and pastern. It is this outside limb that is pushing him through the corner and is responsible for the directional change. The pastern is almost down flat on the ground now, just when the dog needs the most traction. If you were viewing this limb from a perspective on the outside of the dog's turn, you would see that from the point of the toes

all the way up through the shoulder blades, he has a straight column of bones. If the outside front paw of a dog executing a directional change loses traction with the ground, he will slip and fall. This is when the dewclaw comes into play to help increase traction for the outside paw under stress during a change in forward momentum.



#4. The wet sand is kicking up from that outside paw pushing him through the turn. If you examined that paw print in the sand after the run, you would find that the impression in the wet sand was much deeper than the other paw prints, which is indirect evidence for the extra stress on this paw during a directional change. The pastern on the right limb is flat on the running surface at this point, and the dewclaw and stop pad are aiding in the sharp turn by helping to increase grip on the wet sand. This is when the injuries to

joint capsules happen in the dog's toes. And this is why dogs have dewclaws. The extra claw helps to relieve the stress to the four main toes and shows why dewclaws should never be removed from a performance sighthound. This also shows the purpose of a pastern flattening to the ground, springing the dog forward into the collected phase of the DSG.