In Part One of this article we discussed the greyhound and its genre breeds. I emphasized the importance of their having flexible, curvaceous toplines. Further, the amalgamation of length, shape and curvature of vertebrae in the spinal column, with the hard, smooth muscling encapsulating and supporting the loin area, create the much needed arch of the loin. These, together with the great breadth across the loin and pelvis, the balanced length of the femur, (first thigh) and tibia (second thigh) enable such a beautiful, greyhound-like topline. The lesson of Part One is the elementary principle particularly to this unique genre being their topline is an essential component in conveyance.

We will now look to two of the desert breeds in the sighthound group who share the same principle. Both of these breeds, the Saluki and Afghan Hound, enjoy venerable histories and are closely related. We first discuss the Saluki, whose topline critically affects performance resulting in the hounds value to the Bedouins. Figure 1 depicts grace yet connotes strength, speed, and endurance. As they say, a picture is worth a thousand words. I invited Dr. Gail Goodman, editor of the internationally acclaimed volume *The Saluki: Coursing Hound of the East*, breeder of multipurpose Salukis under the Midbar prefix, to share her observations on this most essential component and topic. “Fortunately for Saluki fanciers and judges alike, the breed standard adopted with AKC recognition in 1927 describes a hunting hound, a hound able to run down and kill gazelle and other quarry over deep sand or rocky mountain. Since gazelle are found only in hot dry lands, the Saluki is an ancient, arid lands, rough terrain, long distance runner. Form does follow function, so though the nuances of type may vary quite a bit, size may vary greatly, structure is much less variable. Judging, whether in a breeding program or a show ring, is always the act of evaluating the whole dog, comparing it to the ideal one has constructed through study over one’s lifetime. When considering the standard, some Saluki fanciers choose to focus more on "an impression of grace and symmetry" but the grace and symmetry is that of a dog that can move with "great speed and endurance coupled with strength and activity" continued on page 228
all of which are necessary to run down and kill quarry. Grace and symmetry are subjective and alone do not describe a long distance, high temperature, rough terrain runner. The topline is truly a good indicator of both structural adequacy for the job and overall condition.

We all know that aging dogs like aging people "sag." Salukis that may be somewhat upright when young become more curvy and "sweepy" as they age. As the connective tissue becomes less taut, there is more bend of stifles, more angle in the shoulder, and the back may seem to be hanging off of the withers or may have a slight concave look. Of course, some Salukis are simply born in better condition than others and hold that condition longer due to inherently tighter connective tissue and muscle tone. Salukis in their prime should look like canine athletes. I look for a topline that says, ‘This Saluki can run’ because the whole exercise of stacking a dog is to ‘show’ the judge the potential ‘running gear.’ Convex curves indicate to me that the dog is muscular and taut; muscles are the active element in locomotion. A strong neck, moderately thick and ideally polled, flows into withers that are either buried in the web of muscles from the neck through the back, or there is a slight convex arc at the base of the neck due to longer spinous processes before the anticlinal vertebra. Both types of topline are found in Salukis that excels in open field coursing. At the change in slope of the spinous processes, there may be a slight dip, but regardless of whether there is an arc to the withers or not, there is a definite convex shape to the loin indicating strong back muscles. What is not found in Saluki athletes is the withers in the form of a straight ski-slope: a slide from neck to back also referred to as ‘high withers.’ A long or deep pelvis is also ideal allowing for maximum muscle attachment. Remember, muscles are the active element in locomotion. One of several old Arab standards calls for "the main slope of the body to be from the tail to the shoulder, an arched back with spine showing is considered a sign of speed." This type of topline is referred to in a dog show context as ‘high in the rear’ which for reasons unknown to me is faulted. It shouldn’t be. Whereas a slope downwards from withers to rear should be faulted because it indicates weak hind quarters. Since I have measured a large number of Salukis as well as other running dogs over the past 20 years, I can state that the overall proportion of Salukis is taller than they are long, some measuring square, and very few measuring longer than tall or rectangular. In a nutshell, I look for a compact hound and since muscle is always ‘rounded,’ the dog has a smooth, curvy, short-coupled look, a topline and underline which says to me: this Saluki is ready to spring into action, to turn and leap and avoid obstacles while running at great speed. Salukis are awesome athletes and judging in the show ring should build on their long and unique history."

All-breed judge Wendye Slatyer of Calahorra Kennels, Australia, has an exceptional breed lecture on the Afghan Hound in which she contributes the following excerpt on toplines of the Afghan Hound. “Although anatomically relevant to toplines in all breeds, an understanding of the correct neck into withers into back (including loin) into croup construction is absolutely crucial in Afghan Hounds because their topline should be unique. Afghan Hound toplines do not "flow" as do these areas in most other breeds. It is different from all other breeds including therefore Sighthounds, the nearest being the...
Saluki but they should still be very different from each other. The general outline of an Afghan Hound including the topline should be HARD and ANGULAR and instantly convey the impression of an efficient hunting dog. They should be sharply defined, never rounded, blurred or soft - they MUST be athletic, and the unique topline is part of this whole. Obviously the neck needs to be of sufficient length to allow for the requisite proud carriage of the head and, equally important, for the dog to reach out and grab its prey. The standard states "long," but it is easy for that to be exaggerated into giraffe-like proportions and it renders the animal non-functional. With regards to the topline, incorrect emphasis on too much length of neck (usually weak and stovepipe-like, many are actually ewe-necked) has led to the disappearance of a clearly defined wither with an attempt to produce either a dead flat topline from set-on of neck to incorrect high-set tail which almost invariably leads to an over-long back, or a sloping topline as opposed to the requisite sloping croup. There should be a clearly defined but never prominent or ugly wither, in other words, the neck blends into the area of the withers and that in turn blends into the back, which should be level, of moderate length and well-muscled, with clearly defined hipbones and a sloping croup to allow for the unique, low tail set. A back like this can appear slightly arched over the loin, a direct result of the required muscling and must not be confused with a roach in the topline which is, of course, a fault. Allowing for the muscling, the loin should be straight, broad and rather short. More often seen nowadays than the roach is a slung topline, also resulting from lack of a correct, defined wither and, worst of all, a sharply sloping topline, the current craze, presenting a totally incorrect outline and also usually accompanied by a wither which is too flat. Slung and/or sloping toplines are incorrect because they do not "go" with a hunting dog. Unique to the Afghan Hound, the prominent hipbones should be on the same level as the withers, certainly not lower as is the case with the sloping toplines. Incidentally these hipbones must also be wide apart, i.e. approximately the width of a woman's hand. There is an incorrect tendency for the hipbones to be fairly close together and then to slope outwards as do those of American Cockers. This causes an untypical and incorrect rotary action of the hindquarters. When an Afghan is gaiting, the spine should remain level and reasonably rigid, flexing only in the loin, never roaching or dipping, and neither should the body ever roll. When an Afghan Hound is galloping, the spine must be extremely flexible in order for it to perform the sighthound-specific double suspension gallop. Noted American sighthound authority Pat Ide's excellent article Sighthound Judges Please Note discusses the peculiarities connected with this classic type of dog, stating..."He is the only member of the domestic dog family required to perform the double suspension gallop, the fastest gait of all, which is also used by the cheetah, antelope, hare and most other quadrupeds which rely on speed for existence." The old breed standard printed in Hutchinson's states, "The object of the dog is to hunt its quarry over very rough and mountainous ground, a country of crags and ravines. For this, a compact and well-coupled dog is necessary, rather than a long-joined racing dog whose first quality is its speed..."

Mrs. Slatyer advances in her lecture to the critical point of cervical placement. She points out that the cervical vertebrae throughout our breeds are set differently ergo affecting neck carriage and topline. For example the German Shepherd's are set lower into the shoulder assembly and vertebral column than almost all sighthound breeds and she calls attention to the unique placement of the Afghan Hound neck. In her research, she quotes several breed books, importantly Ferelith Hamilton's The World Encyclopedia of Dogs for skeletal comparisons. Ms. Slatyer writes, “Take particular notice of the difference in the placement of scapula and pelvis between the German Shepherd and the Afghan Hound, never mind the Dachshund. Both bones in the Afghan Hound are placed higher and this creates the definite wither and prominent hipbones that are requisites of the breed standard. The Afghan Hound’s spinal vertebrae are in a straight line and very close to the skin, the Shepherd’s are curved...the whole structure of the Afghan Hound creates a much more upright outline, and is allied to the lesser degree of shoulder and hindquarter angulation, and the greater length of leg. This is because, to earn their living, Afghan Hounds had to gallop, while Shepherds mostly trotted...”

We established that an incorrect topline may be caused by several possible variances in the skeletal structure discussed at length in Part One’s Greyhound essay. As for those hounds who initially display a modicum of shape in profile but while gaiting, drop their heads to or lower than the plane of their withers, back and croup, surely there are various causes for this as well. Mrs. Slatyer discussed the differences between the sighthound and herding breeds and I expound on the thoracic limbs as an influential factor in the trend seen in the greyhound-like genre. The fore assembly is more than just scapula blades and humerus. It includes the cervical vertebrae, the location of their inset (the neck) into the spinal column, the setting of the scapula blades and includes the all-important prosternum and fill between the fore columns. Due to an incorrectly assembled fore-quarter, some greyhound-like genre specimens cervical vertebrae are set too low into the vertebral column. This is a possible construction flaw just as faulty, upright scapula placements, and shorter rather than longer humerus bones are flaws. I suspect there are variations or rearrangements in the cervical connection in many specimens who display the tendency to drop its head. This is not always easily felt due to the muscle cap, but it is noticeable as these hounds step off to gait. They are inclined to drop their heads on a nearly level plane with the withers and back line. Remarkably, a few have even dropped their heads below the plane similar to herding dogs such as the Border Collie. It is helpful to consider the function of a herding dog, such as the border collie, and how it carries out its job. Vi-
ualize herding dogs and how they lower their heads while on the move, herding, driving flocks with body language and eye contact. The lowered plane is typical for herders penning, driving, directing frightened livestock. Hence, man’s selected traits resulted in these drovers necks naturally fitting lower into the shoulder assembly and spinal column. In contrast, most sighthound cervical neck vertebrae are not situated as low as shepherding dogs and, importantly, sighthound scapula blade placement are not set as obliquely as almost all other breeds.

There are obvious variances between sighthound hunters, however their cervical vertebrae joining the vertebral column and scapula placement are not set as obliquely as almost all other breeds. There are obvious variances between sighthound hunters, however their cervical vertebrae joining the vertebral column and scapula placement will typically be higher than almost all other breeds. This higher placement aids in sighting their prey as compared to the wolf for example, whose greatest asset is scent and who usually carries the head hanging, not higher than the level of the back. (See Figures 5-7) To enumerate, I include an informative but brief observation from the world’s foremost wolf (Canis Lupis) authorities, Heptner, Naumov. In Mammals of the Soviet Union, Volume II, Part 1a, (1998), “The wolf is a slender, well-proportioned, powerful animal. It has a strong trunk with sloping back, with high shoulders and a lower, but strong and wide croup. The rib cage is large, deeply descending, the abdomen is pulled in and the neck is powerful and muscular. The limbs are long and strong, the paws are relatively small and the digits are tightly compressed (in a lump). Head large, heavy, with strong jaws, a long but not pointed muzzle, and broad forehead...the wolf’s head looks especially ‘broad in the forehead.’ The animal usually carries it [the head] a bit hanging, not higher than the level of the back, and appears slightly stooping, with its high shoulders. Only the watchful wolf raises its head high.” The included photographs illustrate this treatise excerpt marvelously.

Importantly, big-game sighthound hunters and the wolf require strong trunks necessary to dispatch their such prey. They cannot do so if they have atypical, dysfunctional toplines. While on the hunt, sighthounds but especially greyhound-like breeds trot with head’s carried appreciably higher than the horizontal plane. Keen sight is an attribute of a sighthound. In Part One, I highlighted The Greyhound Club of America booklet, The Greyhound, Form Follows Function, which eloquently states, “During the hunt, the trotting hound would vary the height of its head depending on the terrain, a higher carriage being required to look over obstructions or to view a more distant horizon, or if game has been spotted at a distance too great to begin a gallop.” Captain Graham’s 1885 Irish Wolfhound standard calls for ‘head and neck carried high’ and still today the wolfhound AKC breed standard cites, “The Irish Wolfhound is remarkable in combining power and swiftness with keen sight.” Since we have variances in prey, function and terrain we also have variances in sighthound’s cervical placement such as ‘definite’ withers (clearly defined) which is synonymous with the Afghan Hound. The Afghan Hound, with its long neck for reaching and grabbing prey, straight-back, compact and short-coupling, hunted in starkly different territory of crags, ravines and mountainous territory. So does the remarkable Ibizan or “rabbit dog” we discussed in Part One who is a well-coupled hunter of small but extremely agile game in rocky, scrub terrain with its long neck, straight back, and gently-arched loin. However, the greyhound-like deerhound, wolfhound and borzoi do not have as definite a wither.

Having said all this, I am compelled to mention that there are occasional exceptions where one may find a properly constructed hound who drops their head in the show ring. This may be because of an obvious dislike for exhibition, or being uncomfortable with their handler or even the hound is ailing. A seasoned judge’s close scrutiny of any hound usually will reveal if there are any anatomical shortcomings in length and equality of bones, poorly-muscled, and/or loaded scapula with possibly too low a cervical placement. All of these would contribute to a hound’s flat topline, losing shape on the move and the extreme lowering of the head.
Unfortunately, we also find far too often the extreme opposite of flattening while in profile and gait with lowering of the head. Many fanciers and judges have misconstrued “head and neck carried high” and as a result, we see many hounds with “upright” carriage and construction. Upright carriage is the antithesis of a well-made hound ‘standing over a lot of ground’ [sic] and is incompatible for killers of large, dangerous prey. Not only does upright carriage affect a correct, flowing topline, above all, it can prove deadly for the hunter. One can observe and feel the cervical, scapula placement being set too far forward and high on the skeleton and is usually accompanied by a weak, thin neck. It also has a straightening effect which affects the location of the important prosternum. This decreases the “fill” in between the fore columns, consequently hindering the function of the “fill” which is to protect the forward point of the trunk—to absorb and spread out the force and effect of impact. Fill is required in all our sighthound breeds, including the Saluki and Afghan Hound as well as the scenthound breeds such as the Elkhound. Lastly, they move with a wasteful, up and down movement, rising above and falling below the static—as opposed to having correct, shapely, low skimming, forward momentum.

Most likely, ill-informed breeders began the trend for disregarding the fundamental arched loins in the greyhound and greyhound-like breeds we discussed in Part One. The flatter or level topline is much easier to produce than the indispensable and necessary curved, flowing topline. Additionally, dog show judges are too willing to forgive and minimize this serious fault. The opposite of this transgression occurs in the following two breeds whose level toplines are an absolute must yet variances such as swayback and soft toplines may be observed. Herein we begin with the hound group’s all-purpose dog, the Basenji. This is a powerhouse, a big dog in a very small package and is an ideal sight and scent hound to single out for discussion. Frankly, the breed’s level topline, length of torso and overall silhouette are influential lifespan factors in its native country. The moderate, harmonious proportions of this small but agile hunter are vitally important to type. One must look for the square silhouette, short backed, lightly built dog with equality of angulation in the thoracic limbs to the pelvic limbs. They should always appear higher on leg compared to its length as short-legged and longer bodies are an aversion to the breed. The neck should be well-crested and strong, the overall dog should be covered in smooth, firm muscling, the topline level with no dip. The short back and coupling allows it to turn on a dime and with razor like reflexes, all these are lifesaving skills in the African Bush and jungle.

On this dynamic breed I sought out the doyenne of Basenjis, Mrs. Mary Lou Kenworthy. She has been involved in the breed since the 1960s and is a treasure trove of information. On this subject, she briefly and clearly expresses her thoughts about the breed’s topline. “Basenjis, like so many breeds, have fallen prey to show ring fads. Their standard calls for a level top line. Level must not be confused with ‘flat.’ The top line must remain flexible in order for the dog to move properly. A level top line means that the withers and croup should be on the same plane. In order to maintain flexibility the back should be slightly lower than the withers and loin. In recent years the show fads have created basenjis with two glaring faults. The upper arm is too straight and too short in relationship to the scapula. The rear assembly has been exaggerated in length of bone and angulation. The basenji is supposed to be a moderate breed and not as extreme as most other sighthounds. In order to keep the overpowering rear from trampling on the too straight front the back has been lengthened in many cases. The basenji is supposed to be a short-backed breed. In order to maintain the appearance of a level top line when stacked, the rears are pulled way back behind the basenjis in a fashion that would do justice to Afghan Hounds. Meanwhile the straight fronts with their short upper arms put the front assembly in front of the dog instead of under it and the back becomes a sway bridge between both ends. Strange as it seems, for the last several years as I looked at photos of basenjis that have won at Specialties, I find that the basenjis who won at lure coursing are closer to the standard than the basenjis that have won in conformation. The only good news is that recently the basenjis in the ring are swinging back toward more moderate rears. Let’s hope the fronts improve as well. These improvements should make the top lines return to what they are meant to be.” Mrs. Kenworthy’s comments are forthright and should be heeded by the fancy as its blueprint is unambiguous and those judges armed with even a small amount of breed knowledge will agree that this breed’s shape and topline is straightforward and uncomplicated.

The additional breed I referred to in the Hound Group is the Norwegian Elkhound, however its parent breed club educates fanciers that the Elkhound is not a hound at all. The dog’s Norwegian name is Norse Elghund, Grå or Gray Moosedog, though this dog and its Norse brethren also hunt big game such as bear in Scandinavia Lapland. The Norwegian Elkhound or

continued on page 236
Elghunder, along with the other indigenous hunting spitz breeds, play a vital role in moose hunting which is an integral component in the economic and cultural aspects of Scandinavian society. Briefly, it is reported that typically anywhere from 36,000 to 45,000 moose are killed annually and hunting parties often use the services of the Elghunder to track moose and keep them at bay for the hunters to get in close. The Elghunder’s form and ability to function is so important in Norway that in order for him to receive a show championship he must earn at least one first prize in a hunting field trial. This eliminates any distinctions between show type and field type. Keeping this information foremost in mind, we discuss the essential silhouette and topline this dog must possess to enable it to perform effectively. This squarely-built dog is short-bodied and short-coupled with the rib cage accounting for most length of its trunk and the top line is straight. He is moderate and must be balanced in his proportions. Like the basenji, this is not a trivial detail that can be overlooked or re-styled as this dog is responsible for staring down a moose or other large, dangerous game. He tracks for long hours sometimes in harsh weather and then must have the stamina, courage and agility to dodge and keep at bay the large, desperate or vicious game. Without his essential straight, short-bodied and short-coupled with the rib cage accounting for most length of its trunk and the top line is straight. He is moderate and must be balanced in his proportions. Like the basenji, this is not a trivial detail that can be overlooked or re-styled as this dog is responsible for staring down a moose or other large, dangerous game. He tracks for long hours sometimes in harsh weather and then must have the stamina, courage and agility to dodge and keep at bay the large, desperate or vicious game. Without his essential straight, short-backed top line and trunk, and equitable angulation fore and aft, he cannot turn on a dime, maneuver, dart or elude and will easily be trampled and killed. If you find this unimpressive, go ahead and attempt to stare down a moose only feet apart from you without a weapon and you will experience a life changing event, especially if there are no trees to save you. I have personally met a moose only yards distant and they are very unpredictable and can be aggressive and lethal, especially cows with a calf or a bull in the mating season. Even in gait the vital Elghunder top line is level so as not to waste any energy his medium-size frame requires to sustain him during the time he is at bay. If an elkhound has a longer, soft or swayed topline it is a bad suspension bridge. The square elkhound whose footfalls are not timing perfectly is an unbalanced dog and would, as a matter of logical speculation, be deemed inefficient and most likely removed from any Scandinavian breeding program.

I find it helpful to have Mr. Edward Hall, Somerri Kennels, with 50 years breeding, exhibiting and judging Norwegian Elkounds share his commentary which echo my thoughts. “The back is straight and strong from its high point at the withers to the root of the tail. This is an important factor in a hunting Elkhound having the necessary agility to survive when holding moose and other big game at bay by barking and using a dodging attack. In the case of the moose, the dog is at a great disadvantage with the size of the animal and the antlers and hooves involved which can seriously hurt or kill a dog lacking this capability. The level top line should begin with the support of well laid back shoulders and legs well under. The other factors in the top line are the square dog and the short coupling after the end of the rib cage which should be of good length for good lung capacity. When dodging and holding the moose in place, the correct length of topline and the ratio of rib to coupling are very crucial to this ability. The top line ends with the high-set tightly curled tail so characteristic of our breed. An Elkhound with a top line which rolls from side to side or bounces when moving around the ring is not one which will be beneficial to the hunting Elkhound whether it is caused by structure or condition. One point of confusion for some judges is the standard calls for moderate angulation, so they allow straighter shoulders and rears than are needed for the agility necessary to avoid antlers and hooves. When early experts such as Gerd Berbom and Olaf Campbell were questioned about this, they explained their meaning of ‘moderate’ as compared to that of a German Shepherd or Irish Setter.”

All the contributors have articulated that the topline is primordial and they have attempted to convey this to the uninitiated and to those truly wishing to learn and improve. A few other hounds to be continued in Part Three...