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CONFORMATION INSIGHTS



the history and conformation of

this ancient breed

challenges many beliefs long held throughout the horse world.

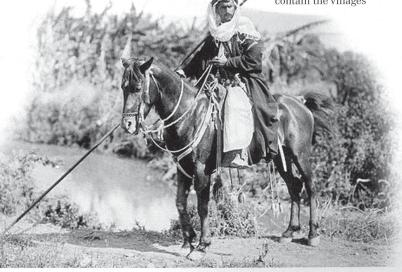
he Arabian horse is a multipurpose breed valued for soundness and endurance capability, yet there is much more to it than that. In the minds of many horse fanciers, the Arabian stands out as ancient and exotic, refined yet tough. It has been considered an "improver breed," used to lighten heavier breeds and to increase their activity and action. Especially in America, the Arabian has been bred for its beauty. Its early history-at least as told by breed fanciers—is shrouded in mystery and set aglow by romantic tales of desert adventure. Advertisers tout the idea that the Arabian is the oldest known horse breed, that it has a shorter back than other breeds, that it possesses a planelevel croup, and that its most important distinctions are a "dished" face and high,"flagging" tail carriage.

In this, the first installment of a three-part miniseries on the Arabian horse, I am going to present in-depth photographic and conformation studies of "foundational" individuals and other horses that have been important in the development of this breed in America and other countries. We'll also be looking at the Arabian through the lens of history and science. Like all horse breeds, the Arabian has a factual history that can be verified by the archaeological record, by studies of

ly nset dhat By Deb Bennett, PhD rse morphological and geographical relationships, and by genetics. My belief is that our readers, who are potentially interested in buying good horses, deserve to learn about the actual nature of the Arabian and all the other popular breeds.

ORIGIN OF"ARABIAN" **BLOODLINES**

Despite its name, the Arabian horse did not originate in Saudi Arabia or in any other country of the Arabian Peninsula. Rather, its roots lie in those areas of southern Turkey, northern Iraq, Syria and Jordan that contain the villages



or summer campgrounds of nomadic Bedouin tribes.

The Arabian horse was created between the eighth and 13th centuries by a few Bedouin families who acquired bloodstock through trade, as gifts and possibly by capture from the wild. Prior to the rise of Islam, Bedouins were camel breeders who did not keep horses. After the Islamic conquest in the mid-seventh century of the greatest horse-breeding country of the ancient world-Persia-and the consequent conversion of its military elite to the faith, Bedouins acquired from the Persians not only good bloodstock but also knowledge of how to select, breed and train horses. In the five centuries between A.D. 800 and the early 14th century, when we get the first written records referring specifically to "Arabyan" horses, the Bedouins developed their own highly sophisticated system for producing the type of horse they consider to be useful and admirable. The original Arabian horse, as bred in its Asian homeland, was entirely the product of Bedouin taste, Bedouin needs and Bedouin priorities, which were not for "show" but for the hard realities of guerilla warfare, gazelle hunting and other forms of long-distance chase and racing.

Until the mid-20th century, when the laws and mechanisms of genetic inheritance began to be scientifically understood, Bedouins—like most people—held beliefs about how particular traits came to be present in offspring primarily in terms of myth and lore. While breeders outside the Arab world tend to cite stallions in pedigrees, the Bedouin practice has always focused upon mares (this emphasis has been proven by modern DNA studies to be very sound because foals inherit many important physiological functions



THE AREA OF ORIGIN OF THE ARABIAN HORSE:

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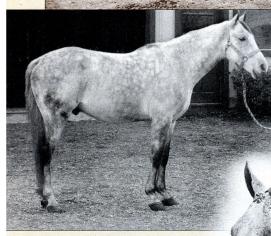
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The heavy black line encircles the area from which Bedouin-bred Arabians were exported from the 16th through 19th centuries. Bedouin villages are scattered through much of this area. The red line encircles the area from which the wild (Afro-Turkic) ancestors of the Arabian horse were taken. It is centered on the headwaters of the Tigris and Euphrates Rivers in an arid, rocky, hilly region.

The Arabian is not the world's oldest breed; that distinction goes to breeds such as the Barb, the Plateau Persian, the Lokai and the Marwari, which are also derived from the Afro-Turkic subspecies and which are known to have come into domestication before there were Bedouins to breed Arabian horses. Horse breeds derived in whole or in part from other subspecies, including the Akhal-Teke, Caspian Pony, Exmoor, Tibetan pony and Belgian, probably also originate before the eighth century A.D. The Arabian is among the most well-documented breeds, by oral tradition and (later) by written records, paintings and photographs.

ARABIAN ORIGINS: TRADITIONALLY BRED ARABIANS



This Asil gelding, bred by the King of Jordan, was exported to the United States in the 1970s. Note the conformation, which is identical to Bedouin horses of 120 years ago. His American owner called this gelding "Galahad," and he was one of the most athletic horses I ever

knew. Unfortunately, the American registry refused to recognize Galahad and the other royally-bred Jordanian Arabs imported with him, even though the World Arabian Horse Organization had previously inspected them and verified their pedigrees.

Syrian Bedouins pose in native costume and war gear in the "Arab village" exhibit at the World's Columbian Exposition in 1893. Again, note the "dry," flat-headed conformation of the superb mare.

> A closer view of Galahad's head and neck refined, elegant and noble.

exclusively from non-nuclear, "mitochondrial" DNA that is inherited only from the dam). Purity—which in breeding means exclusivity—was allimportant to the Bedouins; their term for this is "asil." Bedouins maintain strict rules about which stallions may cover a mare of a certain strain, and all Bedouin breeders take extreme care to sequester mares in heat, believing that if a stallion of "impure" blood were to cover her, all her foals from that point on would be tainted.

The designation of horses is a complex Bedouin tradition. The traditional Bedouin breeder is the head of a family belonging to a specific tribe, or the tribal leader himself, whose horses are also called by the name of the tribe. Over time, tribal names have become equated with particular strains or mare families such as the Keheileh ("Kuhailan"), Saglawieh ("Saqlawi" or German "Siglavy"), Shweimah, Hadbaa, Dahmaa, Obayah ("Abeyan"), Ma'anaghieh ("Muniqi"), and Hamdanieh. However, among many Bedouins the strain name alone is not considered sufficient identification, so that verification of the origin and purity of a mare also requires attribution to the owner. This results in designations such as Saglawieh Jedranieh ("Saqlawi Jedran," i.e., a horse of the Saglawieh strain bred by the Jedran family), Obayah Sharakieh, Ma'anaghieh Sbeylieh, Keheilet Ajus Ibn Jleidan, Hamdanieh Ibn Ghorab or Dahmaa Amer. Real understanding of Bedouin horse-breeding laws requires fluency in Arabic and a familiarity with Bedouin and Islamic culture and traditions that most Europeans and Americans have never acquired.

As with other Semitic peoples of the Middle East, their own family lineages

are of almost obsessive importance to the Bedouins. It is out of this same tradition that we get the endless lists of "begats" in the Old Testament, which are a late written version of an oral tradition that goes back several thousand years. As a historically illiterate people, Bedouins memorized not only their own pedigrees but those of their camels, their Saluki dogs and their horses. The World Arabian Horse Organization (WAHO) founded in 1970, was organized to review and certify pedigree records of Arabian horses worldwide. Its bilingual inspectors work directly with the numerous Bedouin families who continue to breed horses and who wish to have them registered in the national studbook of the country in which they reside. By WAHO definition, a purebred Arabian horse is "one which appears in any purebred Arabian Stud Book or Register listed by WAHO as acceptable."

This is important because when Arabian horses first became available to people in Europe, the Americas and Australia, strain-breeding by traditional Bedouin criteria was simply not possible because there were so few mares. Although recent DNA studies of Bedouin horses show that there has been some mixing of strains over the centuries, out of necessity and sometimes out of ignorance, non-Bedouin breeders have mixed them much more. This has not necessarily been harmful, but it was the first factor that caused Arabian breeding outside of the Middle East to take a different direction. A second and crucially important factor is that the first European to purchase and export Arabian horses was a woman, as likewise was the largest American importer. In Bedouin culture, horse breeding is a man's enterprise and women have had virtually no influence upon it.

BLUNT FOUNDATION HORSES

Lady Anne and her husband Wilfrid Blunt traveled to Egypt, Turkey, Syria and other Middle Eastern countries in the 1870s and were able to purchase Asil horses in Egypt. They founded breeding farms in Cairo and at Crabbet Park in England.



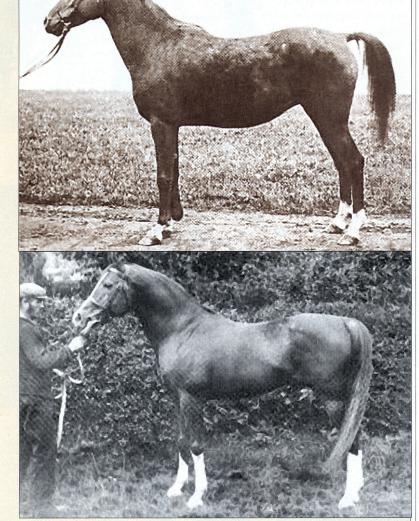
 The Blunts' mentor, Ali Pasha Sherif, on one of his Asil mares, about 1890.

A substantial and beautifully conformed stallion sold to the Blunts by Ali Pasha Sherif. This animal is probably the Blunt's foundation stallion Shahwan, foaled 1887.

The Blunts[†] foundation mare Basilisk, foaled in 1876 and imported to Crabbet Park in 1878; she is the granddam of *Berk, who was later imported to the United States, but her bloodline has otherwise nearly died out.

BLUNT FOUNDATION HORSES

The good producer Queen of Sheba, foaled 1875 and imported to England in 1879. This mare is important to American Arabian breeding because she became the dam of *Astraled to the cover of Mesaoud.



Mesaoud, probably the most influential Arabian horse ever to come out of the desert; his name still appears in the pedigrees of most Arabians bred in the United States, England, Canada, Australia and Russia. Mesaoud was foaled in 1887 and imported to Crabbet Park in 1891, where he reigned as chief stallion for many years. Lady Wentworth eventually sold him to Russia, where he contributed importantly to the breeding program at Tersk.

ARABIANS IN Arabia, Egypt And Turkey

Bedouins have never been eager to engage in horse-trading with outsiders, even non-Bedouin Muslims. When offered a price over ten times higher than the going rate for his fine mare, a Bedouin breeder famously refused, saying, "If I trade her for money, then all I will have is money."

Tomb paintings and monumental sculpture show us that light-bodied, dish-faced horses existed in Egypt at the time of the Pharaohs, some 4,000 years ago. These are sometimes cited as "Arabians." My research on the geographic distribution of horses prior to their domestication, presented in last month's issue, supports the idea that horses existed in prehistoric times in Syria, Lebanon, Jordan, Palestine, the Sinai, northern Egypt and across northern Africa in a thin band bordering the Mediterranean. These horses belong to the subspecies Equus caballus pumpelli, which we have designated the "Afro-Turkic horse." Without any question, it is from this wild population that all the individuals who founded the Asil Bedouin Arabian were taken, but in the time of the Pharaohs—or even much later, in the time of King Solomon in about 900 B.C., who also kept a fine stable, or indeed at any time prior to the rise of Islam in the eighth century A.D.-these horses cannot be called Arabians because there was no Bedouin horse breeding so early. Indeed, at that time there were no Bedouins: In the Old Testament the Bedouins' ancestors are called Aramaeans. They were famous as camel-mounted warriors, but in those days they did not breed horses.

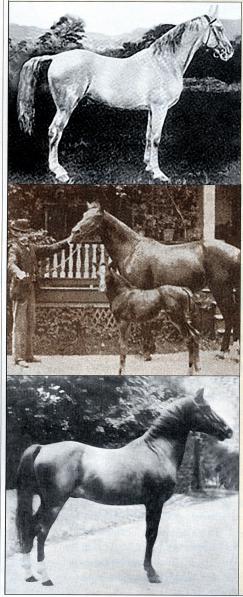
When the Bedouin did finally establish their herds and breeding philosophy, they began trading among themselves out of the recognition that excessive inbreeding produced weaker foals while judicious crosses with acceptable horses bred by other tribes tended to produce stronger ones. As the Bedouin are a traditionally nomadic people, their annual treks from summer quarters in Syria, Iran and southern Turkey to winter quarters in the Arabian Peninsula fostered intertribal contact. It is thanks to the fact that many Bedouin families maintain hereditary rights to watering holes and oases that Arabian horses can be found in numerous Bedouin villages and enclaves in Saudi Arabia, Kuwait, Bahrain, Qatar, Yemen, Oman and the Negev Desert of Israel.

Non-Bedouin connoisseurship of the Asil Arabian begins in the 14th century with the rise of the Ottoman Empire, based in Turkey. As part of an expansionist regime, Ottoman leaders encouraged the establishment of private breeding farms in order to assure a supply of good horses for cavalry use as well as for racing. At about the same time, breeding farms were also established by Muslim noblemen in northern Iraq and Iran, Jordan and Qatar.

Egypt had been under the control of ruling Turkish families for centuries, beginning with its takeover by the Umayyad Caliphate in about A.D. 700 From their base in Egypt, the Umayyads flooded westward, conquering all of northern Africa and crossing the Straits of Gibraltar in A.D. 711 to overwhelm the entire Iberian Peninsula. Finding many suitable horses already in Egypt, Libya and Algeria, the Umayyads imported few of the priceless Asil, contenting

EARLY AMERICAN ARABIANS AND THE BEGINNING OF ENDURANCE COMPETITION

There were very few Arabian horses in the United States prior to 1900, but those whose bloodlines survive are important because they were certainly Asil. They are generally unrelated to Arabian horses imported later and are thus important also as within-breed outcrosses.



*Leopard, a stallion given as a gift to President Ulysses S. Grant by the Sultan of Turkey in 1873. Remarkably, there are a few bloodlines that still carry forward the blood of this very handsome and correct horse. (photograph from the Carol Mulder/Michael Bowling collection)

The important early-day mare *Naomi, foaled in 1877, is pictured here with Anazeh, her foal of 1890 by *Leopard.

Anazeh as a mature horse. The shape of his head is similar to his dam *Naomi's, and is certainly not what many American breeders of today prefer.

EARLY AMERICAN ARABIANS AND THE BEGINNING OF ENDURANCE COMPETITION

One may occasionally still run across an Arabian horse with multiple crosses to *Leopard the similarity in body style is unmistakable. (photo courtesy, Matthew Mackay-Smith, DVM)



*Astraled as a young horse. Foaled in 1900 and imported to the United States in 1909 by W. R. Brown of New Hampshire, he was used as a remount stallion by the U.S. Cavalry from the 1923 season onward. By Mesaoud out of Queen of Sheba (see "Blunt Foundation Horses," page 66), *Astraled is the single most influential "foundational" Arabian in American pedigrees. He influenced not only the Arabian but also the Thoroughbred and the Appaloosa—those stories to be told later in this series!





Gulastra, by *Astraled out of a Mesaoud-bred mare, stands at the root of numerous American Arabian bloodlines. Note the barely perceptible jibbah and dish, broad forehead, substantial muzzle, crisp bone structure and dark, expressive eyes.

Theodore Roosevelt riding a part-Arabian horse in his 1899 inaugural parade as governor of New York. Roosevelt encouraged Arabian

> importation and use of Arabian stallions to get quality horses for cavalry use. At about the same time,



W. R. Brown helped organize and modernize "military endurance testing," pitting his imported Arabians against all comers.

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By the 1950s, military endurance tests had evolved into the sport of endurance riding. Bezatal, foaled in 1958, twice won the grueling 100-mile Tevis Cup. A descendant of both *Fadl (whose history will be outlined in the next installment) and *Astraled, he sired Cougar Rock and other successful endurance competitors. Endurance riding, now an FEI/ Olympic discipline, has become a major impetus for American breeders to produce horses that more closely resemble those traditionally bred by Bedouins.



American fanciers tend to define "Arabian type" above all by looking for a head with a bulging jibbah⁰ and a bend in the skull forming a dish that falls below, rather than between, the level of the horse's eyes. This, however, is not the Bedouin concept; what they look for instead is a head that is wide across the forehead with the bony orbits well defined. The forehead is flat or with slight to moderate jibbah which blends into the snout with little or no discernible dish. The nasal bones may be straight or undulating. The lower jaw is of normal depth and is considered very faulty if excessively shallow. The ears are fine and slender and often rather long, as befits all desert-adapted mammals. The skin is thin, drawn tightly over the bone structure; there is no hint of meatiness. The nostrils are large and distensible. The eyes are of normal size but dark; above all, the expression should be alert and lively yet intelligent and kind.

MYTHBUSTER

The croup of the Arabian is almost never perfectly horizontal. When either the croup or pelvis slope less than about 10 degrees, the horse will have greater difficulty bearing a rider's weight and achieving collection. themselves instead with the horses of the region, which later became known as Barbary Horses or "Barbs." These, too, are derivative of the Afro-Turkic subspecies but have never been bred by Bedouins, are not considered Asil and are therefore not Arabians.

It is not until the 13th century that we find record of an Egyptian sultan, Al-Nasir Muhammad (known as "El Naseri") who kept a stud of Asil Arabians, along with the records necessary to prove the purity of his bloodlines. In the first half of the 19th century, Asil breeding was carried on by the Ottoman nobleman and Egyptian ruler Muhammad Ali Pasha, who purchased Asil horses from village dealers in the Negev and Saudi Arabia. After his death in 1854, with rapid changes of power and the rise of leaders more interested in artillery and armored ships than in fine horses, most of Ali Pasha's collection were given away as diplomatic gifts or taken by the cavalry or by private breeders for crossbreeding.

A few valuable broodmares remained, however, and in the 1880s this remnant was obtained by the administrator and diplomat Ali Pasha Sherif (Ali Bey), who also went back to the desert until he had collected more than 400 Asil horses. Always reluctant to sell to Europeans, late in his life he was persuaded to provide the English baroness Lady Anne Blunt with a dozen. Lady Anne and her husband Wilfrid established a breeding farm in Cairo from which they periodically shipped horses to their Crabbet Park stud in England. When the Pasha died, the Blunts purchased more of his herd. Their most important acquisition for later Arabian breeding worldwide was the stallion Mesaoud, sold to them by Ali Bey in 1889.

THE FIRST ARABIAN HORSES IN AMERICA

There were no Arabians in colonial America, but George Washington owned a partbred on which he is frequently pictured. The iconographic convention in realistic horse portraiture and photography is (or was, until about 1965) that the Arabian horse must wear a leopard-skin shabraq, tasseled headstall or bridle, or tasseled breastplate, even when the rider is not dressed in Bedouin costume. Wherever this is noticeable in a painting or photograph, the intention is to convey that the animal comes from "Arabia."

Egyptian and Turkish leaders frequently gave horses as diplomatic gifts, and in 1840 President Martin Van Buren, himself an avid rider, received two from the Sultan of Oman. A. Keene Richard is remembered as the first American breeder of Arabian horses. He traveled to the Middle East during the 1850s and imported half a dozen horses, but most of his animals were registered as Thoroughbreds by the American Jockey Club (there was no registry for purebred Arabians in the United States until 1908). Of more lasting influence was the importation in 1877 of an Asil stallion named *Leopard, the gift of Sultan Abdul Hamid II of Turkey to President Ulysses Grant. In 1889 breeder Randolph Huntington put *Leopard to the Asil mare *Naomi and got Anazeh, whose name continues to appear in Arabian pedigrees today.

By far the most important event in establishing Arabian breeding in the United States was the Chicago World's Fair of 1893. Also called the World's Columbian Exposition, it was a huge

ARABIAN BODY CONFORMATION

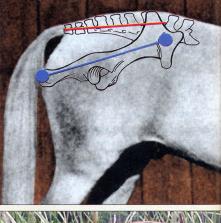
creating the "Arabian triangle" shown

in the illustration. Since the position

The hooves are of normal size and

hard; the tendons are "like iron." The

shoulder-bed is well defined, the chest of the root of the tail is the product of moderately wide, the ribs well sprung. the slope and length of the croup, the Arabian's is "set on" higher than in Depending upon the particular strain, the pelvic angle ranges from near-level many other breeds. at about ten degrees of slope up to 25 or more degrees. The croup is almost always less sloping than the pelvis, (Analytical drawing of Ali Pasha Sherif stallion) (Analytical drawing of *Naomi, Asil mare)





The "Arabian triangle" is the difference in slope between the croup slope (marked in red) and the pelvic slope (marked in blue). Above is a gray Arabian stallion; below is a good Quarter Horse. The difference in croup vs. pelvic angle in the Arabian is 12 degrees, while that in the Quarter Horse is only 4.5 degrees.

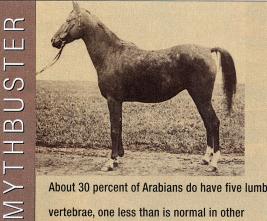
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Asil Arabians Raw Measurements in Photoshop Screen Units		
Raw Measurement	Stallion	*Naomi
Body Length (BL)	4.460	4.154
Withers Height (WH)	4.295	4.295
Croup Height (CH)	4.305	4.287
Head Length	1.662	1.6 est
Neck Length	2.522	2.308
Shoulder Length	1.467	1.502
Arm Length	1.180	1.056
Forearm Length	1.362	1.337
Fore Cannon Length	0.869	0.789
Fore Pastern + Hoof	0.576	0.452
Freespan of Back	0.576	1.820
Pelvic Length	1.414	1.396
Croup Length	0.974	1.103
Femur Length	1.290	1.156
Gaskin Length	0.926	1.027
Hind Cannon Length	1.053	1.153
Hind Pastern + Hoof	0.575	0.539
Total Hind Limb	3.844	3.875
(Femur + Gaskin + Hind		
Cannon + Hind Pastern)		

Proportion	Stallion	*Naomi
Withers Height/Body Length	96.3	103.3
Croup Height/Withers Height	100.2	99.8
Head/Body Length	37.3	38 est
Neck/Body Length	56.5	55.6
Shoulder/Body Length	33.0	36.1
Arm Length/Shoulder Length	26.5	25.4
Forearm Length/Body Length	30.5	32.2
Fore Cannon Length/Body Length	19.5	19.0
Fore Pastern + Hoof/Body Length	12.9	10.9
Freespan of Back/Body Length	35.2	43.8
Pelvic Length/Body Length	31.7	33.6
Croup Length/Body Length	21.8	26.5
Femur Length/Body Length	28.9	27.8
Gaskin Length/Body Length	20.8	24.7
Gaskin Length/Femur Length	71.8	88.8
Hind Cannon Length/Body Length	23.6	27.7
Hind Pastern + Hoof/Body Length	12.9	13.0
Total Hind Limb Length/Body Length	86.2	93.3
Total Hind Limb Length/Croup Height	89.3	90.4

Angle Measured	Stallion	*Naomi
Overall Body Slope	2.0	4
(red line)	uphill	downhill
Pelvic Slope	16	25
Croup Slope	4	14
Shoulder Angle	37	58
Arm Slope	43	35
Fore Pastern Slope		
(weighted limb)	65	61
Hind Pastern Slope		
(weighted limb)	65	58
Angle between shoulder		
and arm at point of shoulder	88	93
Angle between femur		
and gaskin at stifle joint	111	121
Angle between gaskin and		and the
hind cannon at hock	110	120



About 30 percent of Arabians do have five lumbar vertebrae, one less than is normal in other breeds. Sixty five percent of Arabians have 5 ½ lumbars, meaning that the last two lumbar vertebrae are fused together. This condition is also found in some Thoroughbreds and other breeds related to, or derivative of, the Arabian. and popular event featuring cultural and industrial exhibits from every par of the United States and around the world in commemoration of the 400th anniversary of Columbus's arrival. One of these exhibits, sponsored by the Hamidie Society, a colloquium of American, Syrian and Turkish businessmen, was the "Arabian village," which featured Bedouins with native costume and weaponry. They imported 40 to 45 horses from Syria, of which seven died in a fire and others perished from colic or injuries.

We are fortunate that good photographs were taken of the Hamidie Society horses, so that 120 years later we can gain an appreciation for them. The accompanying photo gallery will help you understand the sort of horse the original Bedouin breeders valued.

Here you will find the "iron" tendons and hooves, the fine necks and lithe bodies of the horses that for centuries carried Bedouin raiders across miles of stony desert. The Blunts, fluent in Arabic and Turkish and mentored by Ali Bey, were almost the only Europeans who valued this horse as "needing no improvement." Although forced to cros strains because they had access to onl a limited number of mares, the Blunts nonetheless tried to produce the type of horse they had come to love in the Middle East.

n the next installment of this series, we'll find out the ultimate fate of L the Hamidie Society horses, and what happened when the breeding pro gram at Crabbet Park was handed over to the Blunts' daughter, Judith Blunt-Lytton, Lady Wentworth. We'll learn the identity of the most prolific Arabiar breeder in America and see how her choices also helped to change the direc tion of Arabian breeding worldwide. Meanwhile, please study the conformation analyses of the Asil stallion and mare as you enjoy comparing it with the two dozen other "original-style" Arabians also presented. 🍑

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