

All Equal All Different

The Dilemma of Evaluating Arabian Stallions

■ by **Monika Savier - Tre Balzane Stud**

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Monika Savier discussed the topic with WAHO President and renowned breeder of Arabian horses, Dr. Hans Nagel, on selecting sires, methods, flops and successful strategies.

Savier: Who is to decide, and what are the criteria for determining whether an Arabian horse is suitable for breeding or not?

Nagel: Arabian horses display an ample reservoir of inherent strengths and a broad range. There are a very few characteristics that are distinctive for the breed, but still Arabians are highly versatile in their range of uses overall, accordingly, the criteria for evaluation are widely different. Therefore, it's all important to plan and determine which direction to take in breeding. Only then can somebody decide whether a stallion or a mare is suitable for this goal. What it comes down to is that every breeder needs to decide for himself what is a sensible direction for him to take with his horses and what to specialize in, getting his horses elevated to a higher level in that area.

Savier: Is today's Arabian horse a product of selection by man, or of adaptation to nature and the evolutionary changes inherent in that?

Nagel: In the course of history, the role that Arabian horses played has changed dramatically. They were war and riding horses for the nomadic peoples of the Middle East, and today they



Dr. Hans Nagel, President of the WAHO

are show and leisure time horses and sometimes performance horses, in cases where toughness and stamina are in demand. Accordingly, it was necessary to develop, in the course of time, a whole range of evaluation patterns and selection criteria by which to choose among the horses. But after all, who knows or ever checked what these methods actually achieved? Maybe the Bedouins were right in taking their connection with nature so far as to say if I am to choose a sire, I have to like his eyes; or those who would only allow a stallion to mate if the mare accepted him without reservations; or those people who go to the extreme of reducing Arabian horses to the type found in the area of head and neck and maybe topline, meaning criteria which enchant in the world of shows; or maybe those who are almost obsessed with evaluating the legs of Arabian horses, thinking them indicative of the suitability of the horse for sports performance. It would be interesting to line up all of these approaches to selection and all of these opinions in a neat row and then check for results. Everybody would be in for a big surprise, that's quite sure, for only mediocre gains would be apparent as to aims, selection, and results. Raising their heads and grinning there would be chance, accident, and coincidence!

It is well known that Arabian horses were brought to Europe from all regions of the Arabian world. The most beautiful ones, those with the impressively 'dished' heads, are sure to have originated from Bedouin breeding on the Arabian peninsula. There was merciless selection going on there with the struggle for feed and water in order to survive, as both were in very short supply during certain times of the year. There is a theory saying that the concave profile of these horses might have resulted from consistent malnutrition, particularly during the period of growth. As these conditions were repeated for centuries, the expression of the physi-

cal trait finally became hereditary in some specimens. There have been numerous reports that similar characteristics of the head, which are present even with other species of animals in their embryonic or early life stages, can be perpetuated.

It is also well known that the horses from the north of Arabia were bigger and had more strength of bone. Many of these animals, when they were imported to Europe, were bred in different directions by the State studs involved; some for improving ingenious breeds, and some as selected specimens of Oriental noblesse. What I am aiming at is that studs such as El Zabraa in Cairo, Marbach/Weil in Germany, Janow Podlaski in Poland, Tersk in Russia, and numerous private importers all made their own kind of selection and by that all set their own courses in Arabian breeding. There were also the Davenports in the US, or the Blunt's Crabbet Stud in the UK. They all presented a unique appearance sooner or later.

Savier: *Who sets the course in Arabian breeding today? Who decides which animals are allowed to influence breeding? Which direction does selection take? Is it beauty, performance, character? Is there a common platform?*

Nagel: *An official and formalized selection of Arabian horses, called 'Körung' in Germany, has only ever been known in meticulous Europe, where interventions by state authorities into all kinds of decisions are only too well established. In the US, infractions from 'high ups' such as these were mostly unknown.*

Savier: *WAHO has taken a straight position on that, have they not?*

Nagel: *Yes, they have. There is a single regulation stating simply and plausibly that every Purebred Arabian Horse*





Dr. Nagel with friends during a presentation of his horses on his Katharinenhof stud



Dr. Hans Nagel

whose parents have been registered in one of the studbooks acknowledged by WAHO is permitted to go into breeding. There are still some state authorities exerting influence now and then, and that's unfortunate, but it's rather rare and maybe it's just a question of allowing some more time for the absurdity of these influences to be recognized.

Savvier: To facilitate understanding, we might add that this WAHO rule is applicable for stallions and mares used in purebred breeding. In cases where Arabians are used to improve other breeds, they are, of course, subject to the selection rules laid down for this other breed. They need to be compatible, after all.

Nagel: I might add that in some countries, there are regulations considering a small number of physical flaws presenting enough reason to exclude the animals concerned from breeding. These include tooth irregularities or stallions possessing one testicle only. The degree of heritability of such flaws is still disputable. There is no definite proof, despite of extensive studies. There is no evidence as to the principles according to which such undesired traits are inherited, or how often they manifest in offspring.

With all that in mind, we might want to be provocative and ask why stallion approvals have been carried out at all. As we mentioned already, stallion approvals are based on government edicts that have their roots up to a hundred years in the past. And the most simple explanation is that males produce substantially more offspring than females and are thus more influential for the development of a given breed.

When stallion approvals were introduced a hundred years ago, there was little knowledge about the science of heredity, and in addition, horse breeding and systematic breeding in general were on a rather low level. So a selection of a few good males was already a helpful measure for producing offspring with the desired traits. Later on, however, when breeding had reached a comparatively higher level and progress in the following generations only became apparent in small increments, it was necessary to fall back on different methods that allowed definite measurements of hereditary traits such as size, speed, type, etc. Modern considerations of this kind, however, work only on a prerequisite: the breeding goals need to be clearly defined. Only then does selection have a reference point, as the breeding goal dictates the

On the race track, the finishing post is the point where the future of stallions is decided: unknown gelding or award-winning sire





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The character of a stallion, his calm composure and his trustfulness are important criteria of selection for many breeders

method of selection.

Savvier: To put it differently, it's not enough to clamour and say that we need fresh judges. The breeders of Arabian horses need to take a stand on what they want. And a panel of judges who measure every horse with the same yardstick is certainly no longer up to date.

Nagel: Things get even more complicated if we take into consideration that according to present-day science, the influence of the dam is on average slightly higher than that of the sire. Meaning, the mare has a definite influence on the quality of the offspring, last not least for the reason that during the embryonic stage and with the mare doing early education, the female influence on the foal is highly firsthand. This needs to be added to the effects of inheritance as dictated by genetics.

Savvier: If we sum up all the knowledge we gained from history and from genetic science, surely we need to take a track different from that worn-out one of culling stallions?

Nagel: I am absolutely sure of that. Stallion approvals are no more up to date. That's why WAHO has decided against this method. In breeding, that famous saying of the simple things being best is certainly not applicable. Today, we need to start and think in two phases. The first phase needs





to be a selection according to physical characteristics (phenotype) and leaving enough room for manoeuvring. The second phase is a highly specific selection on the basis of an evaluation of offspring (genotype). This concept was unknown a hundred years ago, while today, it's the norm in animal breeding. The results of a mating are evaluated, and that's the basis for decisions on future breeding. Of course,



Be it the a canter pirouette at Dressage or a sliding stop at Western Riding – Arabian horses are versatile in their uses and are bred according to the sport they are intended for





this is more efficient with species that multiply quickly and produce offspring several times a year, such as with poultry, but even in pig breeding there are hybrid breeders who use clearly defined male lines and matched female lines to produce offspring that conform to the breeding goals. In cattle breeding, breeders can choose among males according to their proven inheritance in the fields of milk or meat yield, for instance. Even in horse breeding, we have long since progressed. On the basis of the victories of the offspring of a race horse or show jumper, a breeding value is calculated for the sire. Whatever the outer appearance of breeding measures, they are all about working towards a clearly defined breeding goal.

Savvier: And with that, we are nearly back on the track of natural selection, which in itself hardly plays a role anymore nowadays, as conditions in nature have changed dramatically. However, horses have maintained their instincts, which still rule their behaviour. Naturally, horses are sweet tempered grass eaters, and when pressed, they react as flight animals instead of attacking and defending themselves. The fastest survives and the devil takes the hindmost. The finishing line at the racetrack simulates this kind of selection, for those who run in the winning ranks

save themselves from being castrated and are allowed to pass on their traits, quite apart from honouring and gilding their pedigrees.

Nagel: And things don't finish here, as there are further aspects to be considered. Naturally, there are Arabians of widely differing types, as they were spread all across the vast area of the Middle East. There is the bigger type of North Arabia; horses that benefitted from the steppes grass of Mesopotamia (Syria and Iraq). And, there is the Southern type from the Nejd, the hot high plateaus of Central Arabia, which is a noble and smaller Arabian horse who had to physically adapt to the harsh conditions of life there. And finally there is the Arabian from the mountainous regions of Iran, who had developed into yet another type due to a different environment. All in all, there is no such thing as a uniform appearance of the breed, as Arabians are not members of a uniform population, and they are even used very differently. They are show horses, riding mounts, endurance racers, hobby horses, and being the most beautiful breed of horses in the world, collector's items.

Savvier: ...and last but not least, cuddly pets for girls, and racing horses for boys...

Nagel: And they are horses who, purely and simply, many



Any stallion needs to be able to do a stand-up, even if he was bred to be an endurance or race horse



The stallions are presented to a panel of judges and display their range of gaits

people just like to have around, and who will react highly positively to this kind of attitude. We don't have to put a lot more thought into whether there can be one uniform breeding goal, or a whole range of them. There is only room for different breeding goals if we don't want to destroy the rich variety of the breed, and if we want to prevent a vast genetic inheritance from being wiped out. We need to define a whole range of different breeding goals and employ the respectively matching methods. That's a highly versatile job and is simply impossible to regulate and dictate from high-up. Of course, it is possible to agree on a common basis for some part of the population and then work jointly on this parti-





Al Lahab, owned by Inge und HJ Friedmann, World Champion in Paris, Champion of a number of international shows, inheritor of champions all over the world. In Aachen, he is only registered, as the German Association refused him the Gold ribbon

cular breeding goal. Let me mention endurance riding in this context, as there are some French breeders who have been highly successful in this area for years now. They have consistently selected their horses in the direction of their goal, and today, the offspring of these endurance Arabians are no longer products of chance. They are the horses who reap the much-coveted endurance trophies. The reliable inheritors, sires and mares alike, are known.

Savier: But that's not something anybody needs state authorities for, or is it?

Nagel: That's just the point. The French applied their personal experiences and know how, and their results were amazing. The initiative was a purely private one, maybe supported by authorities, but not ruled over by them.

Savier: So it might be justified to claim that Arabian horse breeding in Europe needs the principle of subsidiarity, meaning less supervision and regulation by authorities and more individual grass roots initiative from the breeders.

Nagel: That's exactly the approach I recommend. The prerequisite, of course, is experience and a lot of knowledge on how to determine whether a horse is suitable for breeding. If we take showing, for example, there would have to be a highly specific breeding goal for that sector. However, a set standard already exists. Evaluation methods for the show

ring are established, even if they are no longer identical to the evaluation criteria of traditional stallion registrations, despite the fact that the system of evaluation for shows, with their method of scoring points, follows earlier methods. Since the times of stallion approval, and later of stallion registration, the German Arabian Association has outstanding statistics at their disposal, indicating ribbons won by victorious stallions. It's astonishing to see that only a very few of these elite stallions have ever been used in general Arabian breeding, to say nothing of their having produced any good male offspring. Usually, there is no evidence of any male offspring having received decorations at all, there are a few offspring listed and after serving for one or two years, the stallions vanished into thin air. The small number of stallions serving a longer and successful period as sires were mostly imported to Germany, and we may assume that their ancestors, living abroad, were selected according to different criteria from those employed by a stallion approval that takes into account the males only.

Savier: There are examples for that in Italy as well. During the time when the long arm of the ministry of agriculture assessed the Arabian stallions and was known to knock off even show winners, often just because their owner did not humbly bow to state authority, private breeding strategies did not have a chance. The only way to

implement them was to bend to the capricious decisions of the approval commission. At that time, a non-approved stallion was not permitted to be used in breeding at all, even if he had won the Paris show. Fortunately, the Italian Arabian Association, ANICA, has been able to put an end to this kind of hassle.

Nagel: There is another important set of criteria for evaluating Arabian horses, and that's their character traits. It's very unfortunate that the behaviour of Arabian horses, determined by their past in the desert, is virtually swept under the carpet. A whole lot of owners of Arabian horses will mention that enjoyable fact again and again, how close their relationship to their horses is and how likeable these horses are in their personalities. But, when selection takes place on the occasion of official events, these 'soft skills' are not considered at all. If a horse is extremely bad mannered, there are penalties, but nobody asks the question of why these horses behaved the way they did. Are Arabian horses able to take the fuss and hassle of a big show event at all? Are they genetically predisposed to concentrate on their riders? Can we rely on every Arabian to be cool enough to make a safe leisure time partner, or are there individual differences? Are there judges at all who will put an eye out for these differences and select accordingly?

Savier: Arabians who are meant for the race track, on the other hand, need to be entirely different. They need to want to win. They should have the character displayed by a tough and doggedly ambitious 'better to be dead than to come in second' leader type, and not the friendly character of a follower type who doesn't like to get into trouble with the other horses and therefore refrains from overtaking them.

Nagel: Let me put it somewhat provokingly and claim that for a riding mount, it's best to consider personality first and

correct legs second. Considered in combination, and not one or the other isolated, these criteria allow drawing conclusions as to the performance potential of horses, and they are certainly of equal importance for it. Aren't there, after all, famous dressage horses or horses victorious on the race track whose leg conformation leaves a lot to be desired? And how many riders, when talking about their top horses, mention their determination, their will to perform, and not their conformation? So, with most Arabian horses used for leisure time riding, I believe their personality and their behaviour towards people to be more important than correct leg conformation, unless this conformation is clearly impeding their ability to do their work.

Savier: Of course, it's much easier for a judge to assess leg conformation than personality. And, the horse owners take an active part in that, as they are often instrumental in dismantling the natural personality of their horses in order to get them 'capable of showing.' In that context, now, comes the question: "What should the assessment system used by judges during stallion registrations look like?"

Nagel: I think that with show horses, allotting scores with a higher or lower number of points is accepted practice. Most onlookers know what the big points of a horse are, and what his flaws are. I am one of those who believe that it's enough for the spectators to follow the evaluation process by being told the score. If a breeder wants to know more about the judges' evaluation he should be told privately or obtain the assessment sheet, which is meant for his eyes alone. Everything else hurts, in my eyes, for who likes the public to hear a negative assessment of one's own horse, one he cares for on a daily basis and which usually means a lot to him?

Savier: What is your recommendation for line breeders?





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What are the criteria they should select for, apart from the particular pedigree they have chosen?

Nagel: Now we are back to selection and long-range breeding. There are two aspects to be considered. Firstly, the animal himself needs to be assessed, with apparent physical flaws and health risks foremost. With Arabian horses, this assessment should be made at age three, or better at four years, and for stallions and mares alike, of course. Secondly, it's sensible to assess the offspring of any horse who is intended to be used for breeding. For that, at least three offspring need to be born, and the horse in question will be six to seven years old by then. That's easier to accomplish with the males, but as the mares should be included, this timeframe is necessary. Anybody who uses a stallion without having seen his offspring is knowingly taking a risk. The sire's inheritance qualities are unknown, even if his own personal phenotype is perfect. It's obvious that for stallions who display physical flaws, testing the offspring may prove that these flaws are not repeated in the offspring, while on the other hand, the assessment may prove that the handicaps are hereditary and a stallion should not be used for breeding anymore.

None of the other methods that judge, assess and decorate horses with laurels or send them home unpraised are suitable for achieving the purpose that is meant with selection.

They require time and money, but they fail to yield tangible results. A stock show needs to relate to the respective breeding goal, involving only those horses who fulfil the qualification requirements as tested and proven sires and broodmares. If this is impossible to obtain, such shows should not be carried out at all. Nowadays we see some studs becoming particularly influential, with other studs vanishing altogether. Unfortunately, the latter is true for once renowned state studs as well as for private breeders, and worldwide at that. Today's great breeders might consider presenting their concepts and successes in public. Others would be able to learn from that, and an overall improvement of the level of breeding might be achieved without risking losing the diversity of the breed. To use patronizing methods when selecting Arabian horses, that's just out of date nowadays. Today's breeders have widely differing interests, and up to date methods had better involve scientific analysis based on well prepared statistical material. In modern breeding, failing to consider this material means that there is no real basis for breeding. For successfully achieving progress in breeding, breeding results need to be calculable instead of just being left to chance. □