THE RISE OF THE MELTING POT HORSE

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For many decades in Europe sport horse breeding associations and studbooks were organized on a geographic basis and many members developed strong loyalties to their associations. In some countries, such as the Netherlands, Belgium, and France, two studbooks existed side-by-side and promulgated (to varying extents) dissimilar breeding policies. In Germany many studbooks flourished, with most having geographic identities, one having an all-Germany almost-closed approach, and some having an all-Germany relatively open approach. In all cases, despite the ongoing battles, complaints, politics, etc. that are endemic to all organizations, breeders created both populations of horses with distinct athletic traits and genetics and "knowledge communities" where insights and wisdom were acquired, shared, and passed on from generation to generation.

The development of public policy and legislation governing stallion and semen health standards, improvements in veterinary training and practice, use of shipped chilled semen for artificial insemination, the growing acceptance of frozen semen, and improvements in logistics and reliability of courier services that transport semen laid the foundation for increased demand by breeders to use stallions not approved by their own breed associations, including stallions standing in foreign countries. This demand has been further fuelled by the increasing tendency in many Western countries for citizens to question, distrust, and feel alienated from societal institutions (be it organized religion, political parties, etc.) and the inexorable march toward individualism.

In Europe we now have several studbooks that have a clear non-geographic focus and offer breeders everywhere the opportunity to register their foals with few rules or requirements. The most responsible of these organizations state that to be registered a foal must be sired by a stallion that is approved/licensed by a studbook that it a member of the World Breeding Federation for Sport Horses (WBFSH); on the other end of the spectrum breeders can register virtually any foal sired by any stallion even if he is not approved/licensed by a studbook anywhere in the world.

Reasonable people can debate and disagree about the merits of these approaches – I am on record as writing that there are many paths to success, and an open policy can be as successful as a more restricted policy – but the interesting thing about these new models of studbooks is the effect they are having on the older studbooks and their breeding policies, and the long-term consequences for breeding success.

More and more we are seeing older studbooks change their policies to allow breeders to use semen from stallions not approved by that particular studbook. In general this is not necessarily a bad policy but it does raise the question: At what point do these older studbooks lose their long-established competitive advantage that their members and officials possess based on their deep knowledge of the genetics and athletic traits consolidated in the stallions and mares in their own population? As more and

more members import semen from foreign stallions they saw on television (or from stallions whose progeny they saw on television) or are highly placed in the sire rankings, and as more and more breeders transition to the open studbooks that impose few if any restrictions on a breeder's choices, will we see improvements or setbacks in the quality of athletes being bred? In other words, is the rise of the Melting Pot Horse a net positive or negative for the breeding of top-level international horses?

Two Approaches to Breeding

My view on breeding is that there are two fundamental approaches. The first approach is based on using stallions and mares with excellent athleticism whose pedigrees – and especially their damlines – are infused with ancestors that produced international (FEI) athletes. This approach requires intensive observation of what one's breeding program is producing with a view toward trying to understand what each mare and each stallion contributes, and a clear-eyed and dispassionate evaluation of what each mare/stallion combination produces. Is this year's foal excellent and especially with respect to its athleticism? How does it compare to its siblings and to other foals produced by mares from this same damline? Is this foal so good that the breeding must be repeated or can we do better? And of course these evaluations must be made periodically as the foal matures into adulthood.

This is the approach I use, and I believe it is the approach used by many breeders in the long-established and successful breeding associations in Europe. Essentially it is an inductive approach to horse breeding: We learn by what we see on the ground, not only from our own breeding program but from colleagues' breeding programs, and we let the results teach us which way to go to improve the outcomes of our breeding programs. For this approach to be most successful the "soft knowledge" that I have written about previously, meaning the insights into the genetic endowments transmitted by both mares and stallions, must be accessible to the breeders. And this is why, for example, many long long-established and successful studbooks hold events where breeders can see the results of not only their own breeding programs but also the results of other members of the association.

The second approach is the lottery approach (or if you prefer, the catalogue approach): The breeder may or may not understand the genetic endowment of his or her own mare but the breeder certainly does not understand the stallion because he or she has no understanding of the stallion's genetic endowment and how the stallion best transmits that endowment. The stallion choice is made based on the breeder having seen the stallion or his progeny on television, or because the stallion is highly placed on a ranking list, or because the photo and information in the stallion catalogue is glossy and impressive. The breeder believes that an "excellent breeding program" is one that uses "top-ranked stallions". The breeder focuses on the input (i.e., the stallion) rather than the outputs (i.e., the quality of the athletes the breeder produces) in the mistaken belief that the key to success is to use famous stallions. Often these breeders describe themselves as foal sellers and believe that a sustainable and successful program can be built on the back of the most fashionable or highly ranked stallions of the moment.

Implications for Breeders

But this is not the key to success. If it were, breeding would be an easy endeavour and there would be a lot more potential top-level FEI prospects making their way up the levels in sport. No, excellent stallions

produce some excellent progeny but usually only within a circumscribed population or two of mares. It is the very rare stallion that produces excellent progeny across a wide range of populations (i.e., across a wide range of studbooks with very different populations of mares).

This does not mean that a breeder using the lottery or catalogue approach to breeding will not produce some excellent horses from his or her mare, and even a world-class horse. Anyone can breed a world-class Melting Pot Horse...just as anyone can win the lottery. A successful breeder is not one that produces one international horse, or even several international horses from the same mare. A successful breeder is one that produces at least several international horses from different mares from different damlines. Using this standard we can have some confidence that we are seeing skill rather than luck.

Implications for Studbooks

Let's move this discussion back to the level of studbooks and breeding associations. As breeders use foreign stallions a certain percentage of those pairings will produce top-class international horses. Some are attributable to the skill of the members; others are attributable to hybrid vigor and outcross effects; others to pure luck.

Studbooks with a high percentage of mares that lack appropriate pedigrees, damlines, and athleticism can achieve short-term benefits from the open studbook policy and the Melting Pot Horse due to the aforementioned hybrid vigor and outcross effects. We saw that in Ireland, where the introduction of warmblood stallions beginning in the early 1990s led to the breeding of many successful international showjumping and eventing horses, especially by the Holsteiner stallion Cavalier Royale. Except the contribution was short-lived because the introduction of these foreign stallions did nothing to address the fundamental problem: Too many bad mares and too few good mares with appropriate pedigrees, damlines, and athletic qualities. The fact that Cavalier Royale and the other foreign stallions did not revolutionize breeding in Ireland is not the fault of the stallions. We cannot confuse fortuitous outcomes produced by an out-cross sire with improvements in the mare base that create the possibility for true and enduring excellence within the population.

It is important to remind ourselves that studbook rankings are based on the top six horses in each WBFSH member studbook. For a period of time studbooks advocating the Melting Pot Horse can experience the benefits of their members playing the stallion lottery because of the occasional international horse that will be produced by this outcross effect. But true success for a studbook cannot be measured simply by the number of FEI points earned by its top six horses. Have these top six horses come from successful mare families or are they "one hit wonders"? How much depth is there in the studbook: Would the ranking change significantly if the studbook ranking were based on the points earned by the 7th to 12th best horses in the studbook, or the 13th to 18th, or the top 25 horses? Even better than a comparison of the rankings is a comparison of the number of the points earned by the studbook as a percentage of the top-ranked studbook. So in the first instance let's say Studbook B earned 30% of the points earned by the top-ranked Studbook A. Re-compute the rankings based on the 13th to 18th best horses in the studbook (or the top 25 horses in the studbook), and then compare the percentage of points earned by Studbook B to the percentage of points earned by the now top-ranked

studbook. If both studbooks had equal depth the new calculation should yield the same 30%. Although I have not done these calculations my intuition tells me that the percentage of points earned by Studbook B will be significantly lower than 30%, revealing the true lack of depth in Studbook B.

The rise of the Melting Pot Horse may lead to other important problems, especially within less developed breeding associations and countries. Young stallions will be used less frequently as breeders instead import more and more semen from famous or fashionable older stallions. The result is that some young stallions that could have become important sires will never be given the chance. Another consequence is that stallion owners in the countries where breeders are enamoured by the Melting Pot Horse will suffer and face the choice of changing their business model to become semen importers and agents for foreign stud farms or go out of business. We already see this happening in Ireland, where some breeders are rushing to use imported semen from stallions whose names they cannot even pronounce. (One breeder stated that he was using "Diamond Smelly" on his mare -- as opposed to Diamant de Semilly -- and another was using "Coronary Alinsky" -- as opposed to Cornet Obolensky).

The Future

So where does this leave us? For well-established and successful breeding associations with disciplined members the rise of the Melting Pot Horse presents a useful opportunity. Breeders will judiciously use foreign sires to create additional genetic diversity within their populations, and the studbooks will benefit from the possibility of approving young stallions with new genetics.

However for breeding associations with few excellent mares and damlines, and members who are swayed by glossy catalogues, the rise of the Melting Pot Horse is potentially a death knell. It will lead to the loss of indigenous stallion stations as those that do not go out of business will have to transition their businesses to be semen importers, semen storage centres, and agents for foreign stallion owners. Even the very best young stallions in the country will not be given the chance to realize their potential as sires. Some studbooks will capitulate and stop approving stallions, become simple passport issuing organizations, and argue that all they need to do is provide information so breeders can make their own choices. In the long-run these countries will become importers of their riders' international horses and national Grand Prix horses because so few top-class horses will be bred by their association's members.

For those who think I am being overly pessimistic, I hope you are correct. However I know of no breeding country or studbook that has been able to achieve success on the basis of imported semen. Soft knowledge, discipline, and athletic mares that descend from damlines that produce international athletes are the keys to breeding success. Very good stallions are necessary but not sufficient for breeding success – even the ones on television and in glossy catalogues. For some breeding associations the Melting Pot Horse is an opportunity for continued excellence and success; for others the Melting Pot Horse is a Trojan horse.