What impact do Young Horse Shows have on sport longevity?

From the SF study by Elisa Pautex (SF Stallion approval and assistant technical director) and Anne Ricard (engineer and geneticist). Translated by JY TOLA

In order to preserve the horses that frequent its circuits, last year Stud-Book SF asked Anne Ricard, engineer and geneticist, to establish a study on the impact of breeding competitions on the longevity of horses' sporting careers. We bring you the conclusions of this study...

The initiative taken by the SF team is part of a context where respect for the integrity of the horse is at the heart of concerns. "Our objective is selection of course, but above all we want our competitions and circuits not to degrade the physical condition of the horses presented by the breeders," points out Elisa Pautex, project manager within the Stud-book. "The goal is to preserve the horses and to ask them, at breeding competitions, for things within their reach, adapted to their physical capacity."

Last year, SF asked Anne Ricard, engineer at the National Research Institute for Agriculture, Food and the Environment (INRAE), to answer the following question: do young horse competitions for 2 or 3 year olds have an impact on the sporting longevity of participants? Does this have repercussions on the rest of their competitive outings?

"For the studbook, this study, which is based on numerical data, is important because it allows us to answer certain questions from breeders and to envisage the future of the circuits with clarity and concrete information," continues Elisa Pautex. Anne Ricard also presented the results of this study during the annual conference, organized on the occasion of the testing of 3-year-old stallions and the day before the championship of 2-year-old stallions in Saint-Lo. An event which was sold out last year, proof, if any were needed, that the subject interests people.

Sport careers preserved

To carry out this study, Anne Ricard worked by comparison: she took into account a population of horses that had not participated in breeding competitions at 2 and 3 years old (reference population), and a sample of horses, born between 2006 and 2018, which made their debut there. "Anne Ricard has worked with a pool of 195,000 horses born since 1981, including 4,800, born between 2006 and 2018, which came out on the breeding circuits, namely the stallion qualifiers and the finales."

Via a first method of calculation, the engineer worked according to the "risk of reformation", that is to say the probability of the end of a horse's career. For the reference population, the risk of reform is 1. For the stallions having participated in the qualifiers at 2 and 3 years old, the calculated risk of reform is 0.9, and that of the finalist stallions at 2 years old is even lower, around 0.8. "This data reflects the fact that the stallions who participated in the qualifiers and finals at 2 and 3 years old end their careers less prematurely than the reference population," specifies Lisa Pautex.

At the same time, Anne Ricard also worked according to the calculation of the "half-life", and looked at

the average number of years in the sporting career of a horse, always making the distinction between the population of reference and horses having participated in breeding competitions.

"Here again we see that the horses having taken part in these breeding competitions have longer sporting careers", underlines Elisa Pautex. "Anne Ricard refined her research by segmenting the populations of sport horses, by selecting jumping index over 100, then over 130*. The conclusion of her study remains the same: breeding competitions do not shorten the horses sporting career is even longer. Why?

Hypotheses on the impact of breeding competitions.

Thus, Anne Ricard's study reveals that horses having participated in breeding competitions at 2 and 3 years old generally had longer sporting careers.

"There are several hypotheses that can explain this," points out Elisa Pautex. "On the one hand, to participate in these circuits, the horses must have a good osteo-articular and a good health status, which can partly explain this sporting longevity. On the other hand, these circuits require good management, careful education and training of the very young horse upstream, factors which can promote sport performance subsequently...and then, we also know that breeders and owners favors the horses they present during these competitions: there may again be careful breeding conditions upstream, in order to give every chance to the future sports horse. Last thing: breeding competitions highlight horses and often allow the horse to be entrusted to the care of a professional rider afterwards and therefor, for the horse to be well valued. The horse integrates a professional system, where its potential will be exploited at its true value, with seriousness. All these hypotheses can explain why breeding competitions could have a positive impact on a horse's sporting career".

Recommendations regarding well-being listened to.

Last year, as part of the reflection on free jumping devices, the Stud-Book SF approached Professor Jean Marie Denoix, veterinarian and founder of Cirale**. "We listened precisely to his recommendations for the preservation of the horses frequenting these circuits," continues Elisa Pautex. "We asked him what we could do to have as little impact as possible on the health of the horses, and he told us that we could lower the height of the obstacles***. We took these recommendations into account and all free jumping obstacles have been lowered. Our selection mission is at the heart of our actions, but we want to honor it while respecting the physical integrity of the horse. This type of recommendation is important and taken into account in the annual decisions of the Stud-Book. Professor Denoix had also provided, several years ago, his expertise on the osteoarticular protocol requested for the approval of males, noting with regard to the number of x-ray images to be required and their nature". Constantly improving the selection circuits, with the well-being of the horse at the heart of the thinking, also makes it possible, according to Elisa Pautex, to offer breeders, professionals and amateurs, real training plans for their horses. "We know that these breeding competitions are relevant to what the young sport horse must learn and that they meet certain health and technical requirements. With the help of professionals, such as Anne Ricard or the professor JM Denoix, questions are asked, discussions take place and all this contributes to the improvement of our selection circuits and our practices.

Evolution is unavoidable, and we must question ourselves to move forward and become more demanding".

*Jumping index in France is a way of calculating the success of a sport horse in competition. The higher the number the better and also the rarer.

**CIRALE: Imagery and Research Center affecting Equine Locomotion – National Veterinary School.

*** Jumping heights during the French YHS are higher than US YHS. (About 3" per age group).