

Moving Forward by Looking Back

The more I set my sights on being a responsible heritage breeder, the more I focus on what I put forth for the future with both these breeds. Once I began to realize how small the gene pool is with both the Fell and Dales pony breeds, I set goals to pay closer attention to both phenotype and genotype. Most recently, I have formulated a way to accurately look at the North American Fell Pony breeding pool and analyze the bloodlines that are being put forth for the future. This process has given me insight into the specific pathways, be they more or less frequent, back to foundation stock.

Let me lay out an example of what I am talking about by using a well known UK foundation stallion, Heltondale Bobby. Knowing what is being provided for the future involves identifying the producing brood stock and creating a way to look at their pedigrees collectively. For this current work, the window of analysis was brood stock that have produced foals in North America from 2017-2022. The goal is to work towards a 10 yr. window then keeping record of a moving 10 yr. window with each new foal crop. So 2023 will be added sometime early 2024.



Bybeck Yohann and Braeberry Serendipity at Fiddlehead Farm

Ok, so back to Heltondale Bobby, the above stated window of analysis shows North American brood stock has advanced 4 main pathways back to Heltondale Bobby:
(see chart below)

Pathway to Heltondale Bobby	Brood Stock in this Pathway That Produced in the Window of Analysis	# Foals Produced in the Window of Analysis/Total Foals Produced in the Window
Murthwaite Look At Me	6 Stallions 9 Mares	34/220 15%
Murthwaite Ice Man	1 Stallion 2 Mares	7/220 3%
Severnvale Grey Bobby	2 Mares	3/220 >2%
Hinte	1 Mare	1/220 >1%

Source for compilation: FPS studbook via Grassrotts database. Note: This is analysis done by one person (me) and I am willing to acknowledge there could be a small margin of error. Overall I believe the information is accurate enough for the scope of this presentation.

So, how can this kind of analysis be helpful for the future? Well, as it stands alone, it might spark further investigation into prospective breedings, acquisitions, and both short/long term goals for a breeding program in relationship to the other breeding programs contributing to the pool. Strategic and careful watch over line-breeding (in-breeding) so there are ample options for out crossing in the future is essential. If you know you have a line-bred pony that needs to be out-crossed, information like the above may help in deciding the best lines to use for the out-cross breeding. Because stallions have exponential power in advancing bloodlines, this kind of analysis may be helpful in deciding things like what outside mares (if any) you breed to. It may also help you to set goals for how many foals a stallion will produce before retirement. For me, it will help to plan which foals I retain and think about who I will match them with, should they become brood stock.

With this information, let me scrutinize one of my own breeding choices to give example of how this kind of analysis can help in making decisions. So here, we will talk about breeding my current stallion, Bybeck Yohann to one of my mares, Braeberry Serendipity. Yohann is line bred (Murthwaite Timothy) a pathway to Heltondale Bobby via Murthwaite Look At Me. I would also consider Yohann tight-line bred to Heltondale Bobby with 2 other pathways going back to him. Fortunately for Yohann, the pathway back via Murthwaite Timothy has not been handed down yet in North America. Here is a quick look at Yohann's 3G ancestors in light of what has been passed on in the 6 yr. N.A. breeding pool:

G1/Frequency in the Breeding Pool	G2/Frequency in the Breeding Pool	G3/Frequency in the Breeding Pool
Bybeck Rodney/0	Murthwaite Smoking Joe/0	Murthwaite Ice Man/3 Murthwaite Magic/0
Ghyllbank Maddie/0	Bybeck Katie/0	Murthwaite Timothy/0 Orton Hall Diana/0
	Murthwaite Timothy/0	Murthwaite Look At Me/15 Murthwaite Blizzard/0
	Bybeck Debbie/0	Lunesdale Mountain Mist/22 Bella/0

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by Kimberly Dunn

So, even though the majority of Yohann's 3G ancestors have not launched forward in North America, he is tight-line bred going back to some popular lines. For me, this means I will want to be strategic in my matches for him. I will also want to keep a close eye on what gets added to the North American breeding pool in the next few years to come. So far in the analysis window, Braeberry Serendipity and her sister Braeberry Whimsical Legend are the only 2 ponies to pass on the pathway via Severnvale Grey Bobby. The resulting foal between Yohann and Serendipity will still be considered line bred and will do best, if bred, being matched to a pedigree that completely out-crosses Heltondale Bobby/Murthwaite Look At Me. I hunch this is doubly true seeing the popularity of Murthwaite Look At Me in foal pedigrees worldwide. As I see it, one of the goals of a heritage breeder is to consider what options they are producing for out-crossing in the future. We can do this with more accuracy if we better understand what others are producing and looking at how we can complement, pace down, or fill in gaps of what is happening collectively with bloodlines.

Overall, this example is just one small pane of glass in the window of analysis. Consider it an 'entry point' for further independent and collective investigation. There is much more to come. As I continue forward and share these kinds of analyses, I hope other breeders will join in on constructive discourse for the benefit and health of the future ponies yet to be revealed. I can offer consultation services by analyzing the pedigrees in a program, weigh them in light of the whole producing gene pool. Let's all work together to better understand what has been done in the past with bloodlines and how we can impact the future for the better.