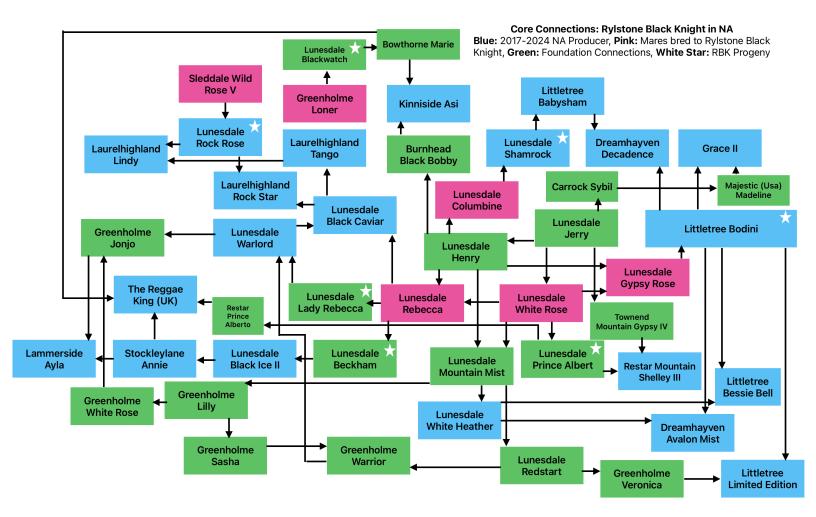
Rylstone Black Knight born 1993 by Ferrymount Timothy

Blue text-NA producing stallion, Pink text-NA producing Mare, Green Text-RBK in 5th generation. Bold (all colors) indicates RBK progeny as they relate to NA breeding pool (2017-2024) Total Global Registered Foals for RBK 33, 2000-2003

RBK Paired w/	Foundation Progeny and Related NA Contributers 2017-2024	# NA Future Prospects born since 2017 Produced by Each Contributor.
Sleddale Wild Rose V (Drybarrows Jeff x Sleddale XIII)	Lunesdale Rock Rose Laurelhighland Lindy Laurelhighland Rock Star Group Total	0 1 13 14
Lunesdale Gypsy Rose (Lunesdale Henry x Lunesdale White Rose)	Littletree Bodini Dreamhayven Aphrodite Dreamhayven Valhalla Dreamhayven Decadence Dreamhayven Arcadia Bo's Gypsy Dreamer Dreamhayven Endora Dreamhayven Avalon Mist Grace II Littletree Bessie Bell Dreamhayven Daphne Jane Littletree Limited Edition Hardenberg Griffen Dreamhayven Double Agent Group Total	2 3 3 3 5 7 0 3 2 1 1 1 2 1 34
Lunesdale Columbine (Lunesdale Henry x Sleddale Rosette XVIII)	Lunesdale Shamrock Littletree Babysham Dreamhayven Dahlia Dreamhayven Decadence* Group Total	1 3 1 3* 8
Greenholme Loner (Heltondale Black Prince III x Greenholme Freda)	Lunesdale Blackwatch Kinniside Asi The Reggae King (UK) Group Total	- 5 0 5
Lunesdale White Rose (Lunesdale Jerry x Adamthwaite Dawn)	Lunesdale Prince Albert Restar Mountain Shelley III Willowtrail Black Robin Angelmeadow Crown Jules Willowtrail Spring Maiden Willowtrail Josie Littletree Tia Maria The Reggae King (UK)* Group Total	- 0 0 0 3 1 2 0 6
Lunesdale Rebecca (Lunesdale Henry x Lunesdale White Rose)	Lunesdale Beckham Lunesdale Black Ice II (UK) Allswell Zara Laurelhighland Black Magic The Reggae King (UK)* Lammerside Ayla Lunesdale Lady Rebecca Lunesdale Warlord (UK) Lunesdale Black Caviar Laurelhighland Rock Star* Laurelhighland Tango Laurelhighland Topaz Laurelhighland Mayblossom Group Total	- 0 2 2 0 0 - 7 11 13* 0 0 0 0 35
Total All	37 Producers out of 200 producers 2017-2024. 19%	86 Prospects out of 218. 39% (Prospects in multiple mare groups only counted in 'total all' one time.)



Scope and Intention

The above analysis was inspired by questions on Rylstone Black Knight's influence going forward into the future prospective breeding pool in North America (NA). With the state of Fell pony breeding in NA, given foal crops have averaged 39/year since 2017 produced by a breeding pool of only 200 mares and stallions, every mare/stallion match should consider what bloodlines are collectively being put forth for the future. Substantial inbreeding and line breeding of these ponies is something we inherit from our main breeding stock source. That, combined with very few programs in NA, the distance each program is from another, and the investment involved in any one pony, makes goals for outcrossing towards diversity very challenging. Even though line breeding traditions lend to maintaining type through genetic homozygosity, it comes with risk of homozygosity in traits or mutations that are undesirable. This work looks deeply at what will be available for future breeding. This deep future forecasting looks beyond an individual foal's outcrossed pedigree. A breeding decision may also need to consider what bloodlines are also being put forth by the other breeders involved.

Summary

The yellow bar of data in the first table answers the first main question, "How influential is the bloodline of a foundation pony in the collective breeding pool?" For Rylstone Black Knight (RBK), we see 19% of the breeding pool is passing on RBK bloodlines. We also see these 37 producers have produced 86 prospects so far, currently 39% of total prospects since 2017. Note: 'prospects' entail ponies recorded or known alive and non-castrated. Prospects are not counted here if their parents only have RBK in the 5th generation. Isn't it interesting how, depending on individual breeding decisions, 19% of a breeding pool can end up producing 39% of the future prospect pool? In this case, the main cause is the high number of stallions (12) in this group. It will also be interesting to see if there will be a high number of Warlord, Black Caviar, and Rock Star prospects end up contributing as we see this is already the case with Littletree Bodini. In many cases, limiting a stallion's total contribution could be necessary for the future.

The second question is, "How many pathways, referring to how many different matchings, exist back to the foundation pony?" For diversity of the prospects, we want to see as many different matches as possible. The first table shows NA has 6 pathways (6 mares matched) to RBK. Certainly 6 is better than 2 or 3. However, the third question helps us understand the level of diversity among the matches.

So the third question is, "How related are the different matches to each other and to the pony they are matched with?" The colored box chart shows how those 6 mares (pink boxes) are related by showing arrows from their common ancestors (green boxes) through to 21 of the 38 NA producers in this group. This chart helps us see a core connection with 4 of the 6 mares: Lunesdale White Rose, Lunesdale Rebecca, Lunesdale Columbine, and Lunesdale Gypsy Rose. Lunesdale White Rose is not only the dam of Rebecca and Gypsy Rose, but also 2 foundation stallions in this mix: Lunesdale Mountain Mist and Lunesdale Prince Albert. This is compounded by 3 of those 4 are sired by Lunesdale Henry who is 1/2 sibling to White Rose. As that core expands, you can see the compounding of those lines continues with NA contributors such as Lunesdale Warlord, Lunesdale Black Caviar, Littletree Bodini, etc.

The fifth final question is, "Should I be strategic in matching (or choosing not to match) a pony that has 1 or more lines to RBK? The yellow bar data in the first table and the data in the box chart gives strong indication that we should be considerate and thoughtful in these decisions. Given a high number of this group is also connected by a secondary line (Lunesdale White Rose/Lunesdale Henry/Lunesdale Jerry), solidifies the need for consideration. Other deep dives will most likely bring insight into the over prevalence of lines connected to Lunesdale Henry, Lunesdale White Rose, Lunesdale Jerry, Lunesdale Rebecca, Lunesdale Gypsy Rose. In my opinion, another stallion coming from this group and adding more prospects with these tight lines could cause problems.

The basis for all data was sourced from an independent analysis of NA Fell pony foal crops 2017-24 by forming reverse pedigrees from the Grassroots database. Given the potential for small margins of error, the data is intended for thought and inspiration to do your own research related to NA Fell pony bloodlines. Questions/clarifications are always welcome.

Note: Addressing the Straw Man's Argument

There are breeders who do not want to pay attention to these matters, do not want them brought to light. Some have even gone to the trouble of noting stud book inaccuracies as license to just breed what you like. A few push back on this data by fabricating a narrative that giving such attention requires ignoring breeding for type. The insights I offer as well as my opinions are in no way offered as argument to not consider attention to type and traits. Ethical breeders pay close attention to both type/traits and collective bloodline trends. Breeding decisions weighted on phenotype (what we see) will not solely preserve type for the long run.