Rules Are Made To Be Broken

by

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Given that my articles have been published in various magazines around the world, it probably should come as no surprise that I get a lot of emails asking many questions related to what I have written. This is probably good in a way because sometimes these questions give me new topics to write about. I was recently sent an email with an attached pedigree from a fancier in Denmark. In the body of the email, he first asked me, "Since one of the sets of great grand parents on the father's side were inbred (brother sister mating), did that mean that this current pair was producing hybrids?" He further went on to say that there was a common ancestor on both sides of the pedigree so maybe they were really part of a line-breeding scheme.

Because many fanciers find line-breeding, inbreeding, and hybridization to be a complicated intimidating subjects, when attempting to explain various portions of these topics, I generally try to stick to the more accepted practices. However, as I am continually discovering, many these subjects are not as etched in stone as we have been lead to believe. The perspectives generally presented to us are really more guidelines than rules, and while they help us to understand and remember the various concepts associated with these subjects, they still should be questioned on a regular basis.

For instance, a very large portion of my breeding program is based on the rules or guidelines that have been presented to us over the years. However, this sport is about having the edge, and without it, you will be doing exactly what everyone else is doing. Therefore, I am always experimenting with about 20% of my breeding program. There is no better way to find out the validity of the rules than to test them yourself.

As a side note, if there is one rule that is etched in stone, it is that most great champions fall into the classification of being hybrids. However, most hybrids themselves are not good pigeons. Therefore the task at hand is to first figure out how to breed successful hybrids, and second to figure out how to increase the percentage of successful hybrids through breeding. As time goes by, I am convinced that this should be the consuming focus of every breeding loft!

Getting back to our fancier, he has both an inbred pigeon in the somewhat recent background of his pedigree and a common ancestor on both sides of the pedigree and the question is whether he is producing line-bred or inbred pigeons from this current pair. I guess I would first have to ask if there were any other related pigeons on one or both sides of the pedigree, which wouldn't be quite the same as the specific common ancestor

that he mentions. If there are other relatives as well as this specific common relative on both sides of the pedigree, then I would probably classify the offspring as at least line-bred pigeon, and if there were enough close relatives, it might even classify as being inbred.

If there is significant commonality on one side of the pedigree, but only in a specific pigeon on the other side of the pedigree, then I would need to ask about the position of the specific common ancestor on the pedigree. If this pigeon were some generations back in the pedigree, then I would be apt to classify the offspring from the pair as a weak hybrid. However, as this common specific ancestor moves closer to the front of the pedigree, I would tend to classify it as something similar to a backcross.

These calls are never simple, and they are usually dependant on the overall direction of the breeding as displayed on the pedigree. When we are talking about a percentage of inbreeding, that percentage can either be going up, down, or remain the same, and the placement of a single pigeon can change the direction dramatically. For instance, a father from an inbred family mated to a mother from an unrelated family changes the output from inbred to hybrid. Exchange the outcross mother for sister to the father, and suddenly you are increasing the inbreeding. Move this sister father back in the pedigree, and it may have little effect either way. Everything boils down to which pigeons you are working with and where they are located within the pedigree.

The pigeon fancier and geneticist, Dave Shewmaker, once told me that when out-crossing, it never hurts to have a small amount of distant common ancestry on both sides of the cross. Given all of the explanations of hybridizations, this concept has always been presented as a taboo, and, frankly, it is one that I probably wouldn't have tested had I not found myself in the position of doing so. Having now used this approach on several occasions, I can say that there is probably something to this, as it has been working very well for me. Think of this small amount of commonality as being similar to line-breeding, they may not have many common genes, but the ones they do have will be more compatible.

Early last year, I selected several HRV for their T-check (velvet) color pattern, and their potential ability to work with my Horemans family. Since I was able to get them at a very reasonable price, I purchased eight, but then I quickly cut them down to two, an older hen, and a younger hen that I have not used. As I happen to be a big fan of mating blue T-checks and dark checks to red color based pigeons, such as red T-checks, dark red checks, red checks, and even silvers, I immediately decided to cross these HVR's to my silver line.

As some of you probably already know, I also have a blue line, which is the backbone of my loft and it is primarily made up of blue bars. The blue line and the silver line have a common great grandfather, but each line has been subjected to very different out-crossing/backcrossing from other line; therefore, several generations later, while they are phynotypically compatible, they are genotypically different enough to produce hybrids when mated together.

Let's start out with the HVR hen and silver line. When mated together, they are clearly a cross, which I believe would have flown very well. However, because of the age of the HVR hen, I didn't want to risk any of her three youngsters by sending them out to fly. This left me with three hybrid children, one dark red check hen, one red check hen and a dark check cock. In most cases, if hybrids were put out to race, at the end of their racing careers, they would be used as backcrosses into the existing family, which in this case would be the silver family. However, recently, I have been experimenting with different ways of extending the hybrid concept by another generation.

While we have always been told that hybrids won't breed very well except in backcross situations, the fact is that they can often be "cut" (out-crossed) a second time with excellent results. I call it "cutting" because through out-crossing, you are dramatically reducing or cutting the amount of inbreeding. The "tighter" the breeding (more inbreeding) on the family side of the mating, the slower it seems to unravel through out-crossing. Overall, I am finding that most multigenerational inbreds, can be cut twice with no real problem. In fact, I am finding that in a number of instances, the second cut out performs the first. At the same time, I have also discovered that pigeons that are cut a second time, don't backcross very well.

Getting back to our example, I crossed the old HVR hen to a cock from the silver line to perform my first cut. Now if I were to mate the youngsters back to either parent at that point, I would be backcrossing, and again this would be tightening the genes; instead, I cut them again. While I have had some very good success using another unrelated cross in performing this second cut, I am going to explain, another method. On the second cut, I took the children from the first cut and mated them to double inbreds from my blue line.

Let me take this opportunity to make several points. First, while the HVR/silver lines have been cut once to produce hybrids, the blue family is still very tight as it hasn't been cut yet. By mating the blue line to the hybrids from the HVR/silver's, I am then in effect mating an inbred to a hybrid to produce a hybrid. From a hybridization standpoint, nature doesn't seem to see the hybrid parent as any different from a pigeon with a wider genetic base.

Second, Dave Shewmaker's comment about commonality comes into play here because the proven commonality between the silver and blue lines helps to further align the silver line with the blue line, which, by default, is now attached to the HVR line. This helps to assure a good genetic docking point between these lines. As you can hopefully see, I have hedged my bets in every direction.

Since I mentioned the T-checking a number of times in the above, some of you are probably asking, "Why would he bring in an old T-check hen to use it this way?" Well, the answer is, I didn't. I was actually more interested in indirectly backcrossing her into the blue family for her color. The fact is that when I brought her in, I was hoping she would last two years. In the first year, it was critical that she produced a quality T-check

or black check cock, which she has done. This year, she will be mated to her son, and, assuming they lend themselves to inbreeding, between them, I hope to get at least four T-check or black check children to choose from.

These four children will be mated against the blue line to produce hybrids, and then the best of the hybrids will be backcrossed into the blue family so that I can obtain the dominant T-check coloring. Now, I am not looking for a bunch of black pigeons, but at the same time, my overall goal is to replace a significant portion of my recessive blue and silver bars with the more dominant checking pattern.

Some of you have probably wondered if hybrids display any noticeable differences from other pigeons. The answer is that actually there are some very noticeable differences, as well as some less noticeable but very common differences. Generally, hybrids are somewhat larger in size than their parents, and they tend to feel denser, more full muscled, and somewhat heavier than their parents. They are often harder to hold, and they seem to have an unusual strength about them. Ideally, they should gain more strength than weight. When the fancier holds the wing open, they tend to want to press their wing down. Generally the feathering is a step up from the parents and their wings are slightly longer. They are more vital in every way, and you can usually see this increased vitality in the rapid movements of their head when they are in the loft.

As I stated earlier, most winners are hybrids in one form or another. At the same time, hybridization doesn't always kick in, and many pigeons that should be hybrids, end up looking about like their parents. While I can't say for sure why this is the case, my guess is that when two dissimilar sets of genes are slammed together, some improve from it, and others show signs of weakness

I hope that this will help fanciers that are working with inbreeding, line-breeding, and hybridization realize that there is more than one approach to these subjects, and that right or wrong is determined through varying degrees of success.

Until next time!

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